

(1979 - 82)

Part I – Appendix B



South Saskatchewan Rivers



ENVIRONMENT

Environmental Protection Services
Pollution Control Division
Water Quality Control Branch



JHI - 7 1986

THE LIMNOLOGICAL CHARACTERISTICS OF THE BOW, OLDMAN AND SOUTH SASKATCHEWAN RIVERS (1979 - 82)

PART I

NUTRIENT AND WATER CHEMISTRY

APPENDIX 'B'

Prepared by:

P.M. Cross H.R. Hamilton S.E.D. Charlton

Alberta Environment
Environmental Protection Services
Pollution Control Division
Water Quality Control Branch
Edmonton, Alberta

March 1986



B-I NAQUADAT printout of routine, precision and diurnal variability study data



PAGE 1

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

		07506L NITROGEN TOTAL AMMONIA N	::::::	::::::	::::::	11			בננ נ	[]
		07110F NITROGEN DISSOLVED NO3 & NO2 N	.08 19L .09 10L .06 19L .07 10L	.06 10L .03 19L .02 10L .02 19F	.04 19F .03 .06 10L .06 10L	.05 10L		L.01 10L .05 10L .07 10L	.07 10L .05 .04	.02
	Noo	07661F NITROGEN DISSOLVED N	.10 61L .11 51L .13 61L .13 51L	.10 51L .08 61L .08 51L .10	.11 .09 51F .18 51L .15 51L	.17 51L .14 61L .12 51F .10 51F	.11 51F .11 51F .11 51F .11 51F	.10 51F .11 51L .11 51L .12 51L	.12 51L .10 51F .12 .12	.03 51F .05 51F .05 51F
	UTM 11 689900E 5662700N	15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 66L L.003 56L L.003 56L L.003 56L	L.003 56L L.003 66L L.003 56L L.003 66F	L.003 66F L.003 .004 56L L.003 56L L.003 56L	L.003 56L L.003 56L L.003 L.003	L.0003	L.003 56L L.003 56L L.003 56L L.003 56L	L.003 56L L.003 L.003 L.003	L.003 L.003 L.003
	PR 4 UTM 11	15356F PHOSPHORUS DISSOLVED INORG. PO4 P	L.003 46L L.003 56L L.003 56L L.003 46L	L.003 56L L.003 46L L.003 56L L.003 46F	L.003 46F L.003 L.003 56L L.003 56L L.003 56L	L.003 56L L.003 56L		L.003 56L L.003 56L L.003 56L L.003 56L	L.003 56L L.003 L.003	.003 L.003
	LONG. 114D 17M 21S	15103F PHOSPHORUS DISSOLVED P MG/L	.004 13L .003 03L .004 03L L.003 13L	.004 03L L.003 13L L.003 03L	L.003 13F .003 .004 03L L.003 03L	L.003 03L .005 03L .005 .003	.003	.003 L.003 03L L.003 03L L.003 03L	.004 03L .003 L.003 .009	m m m m
1	SM 9S LONG.	15301L PHOSPHORUS TOTAL INORGANIC P MG/L	0000 0000 0000 0000 0000 0000 0000	L.003 L.003 L.003	000°. 4000°. 800°.	,000 ,		N N N N N	L.003 L.003 L.003	2000.
	LAT. 51D ARSPAW DAM	15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L		.013 .008 .011	.012 .010 .013	.0007	.006 .006 .018 .002		.0003	.005
	05BH2090 BELOW BEA	SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
	STATION 00AT05BH2090 BOW RIVER BELOW BE	SAMPLE DATE MST D M Y HR	10 03 80 0825 10 03 80 0830 24 03 80 1540 24 03 80 1545 08 04 80 1135	08 04 80 1140 21 04 80 1225 21 04 80 1230 05 05 80 0605 05 05 80 0610	20 05 80 0555 20 05 80 0600 02 06 80 0700 02 06 80 0701 02 06 80 0702	02 06 80 0703 02 06 80 1245 02 06 80 1330 02 06 80 1345 02 06 80 1430	02 06 80 1530 02 06 80 1730 02 06 80 2130 03 06 80 0130 03 06 80 0530	03 06 80 0930 03 06 80 1100 03 06 80 1101 03 06 80 1102 03 06 80 1103	03 06 80 1104 03 06 80 1330 16 06 80 0715 01 07 80 0700 14 07 80 1400	28 07 80 0700 11 08 80 0700 11 08 80 0730 11 08 80 1100

PAGE 2

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

4 UTM 11 689900E 5662700N PR 9S LONG. 114D 17M 21S 5M STATION 00AT05BH2090 LAT. 51D BOW RIVER BELOW BEARSPAW DAM

07506L NITROGEN TOTAL AMMONIA N MS/L		י די						:::::
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L		. 022		. 02	001000000000000000000000000000000000000	. 08 . 08 . 08 . 16	L	
07661F NITROGEN DISSOLVED N	.04 51F .04 51F .04 51F .04 51F	.04 51F .03 51F .04 51F .09		80.	.05 .00 .08 .08	.10 .15 .12 .32	. 13 . 23 . 23 . 05 . 12	.17
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	L.003 L.003 L.003 L.003	L.003 L.003 L.003 L.003		L.003	L.003 L.003 L.003	L.0003	L.0003 1.0003 1.0003	L.003 L.003 L.003
15356F PHOSPHORUS DISSOLVED INORG. PO4 P		L.003		L.003	L.003 L.003 L.003	L.003	L.003 L.003 L.003	L.003 L.003 L.003
15103F PHOSPHORUS DISSOLVED P MG/L	L.003 L.003 L.003 L.003	L.003 L.003 L.003 L.003		.003	L.003 L.003 L.003	L. 003 L. 003 L. 003	L.003	.005 L.003 L.003
15301L PHOSPHORUS TOTAL INORGANIC P MG/L		L.003		L. 003	L.003 L.003 L.003	L.003	L	.018 .023 .012 .013
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.004 .007 .006 .019	.001 .009 .007 .006	.003 .005 .006 .004	L.003 L.003 L.003	L.0009	L.003 .003 L.003		.018 .023 .020 .018
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	11 08 80 1530 11 08 80 1545 11 08 80 1630 11 08 80 1730 11 08 80 1900	11 08 80 2300 12 08 80 0300 12 08 80 0700 25 08 80 0700 08 09 80 0800	09 09 80 1100 09 09 80 1101 09 09 80 1102 09 09 80 1103 12 09 80 0900	12 09 80 0901 12 09 80 0902 12 09 80 0903 12 09 80 0904 22 09 80 0730	06 10 80 0700 20 10 80 0830 03 11 80 0915 03 11 80 0917 18 11 80 0800	08 12 80 1320 05 01 81 0800 26 01 81 0830 16 02 81 0800 09 03 81 0800	20 03 81 0900 05 04 81 0900 21 04 81 0800 04 05 81 0800 19 05 81 0915	01 06 81 0900 01 06 81 0905 01 06 81 0915 01 06 81 0920

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 11 689900E 5662700N PR 4 9S LONG. 114D 17M 21S 5<u>T</u> STATION 00AT05BH2090 LAT. 51D BOW RIVER BELOW BEARSPAN DAM

NITROGEN TOTAL AMMONIA MG/L ::: NO3 & NO2 DISSOLVED NITROGEN 07110F MG/L 03 03 03 111 108 11 12 15 16 DISSOLVED NITROGEN 07661F .14 MG/L .12 98 10 17 17 16 PHOSPHORUS DISSOLVED овтно РО4 L.003 L.003 L.003 .008 L.003 PHOSPHORUS DISSOLVED INORG. PO4 15356F L.003 L.003 L.003 L.003 MG/L L.003 L.003 L.003 L.003 .008 .003 L.003 L.003 PHOSPHORUS DISSOLVED 15103F L.003 1.003 L.003 .008 L.003 L.003 L.003 L.003 .010 .003 .003 .004 L.003 MG/L L.003 ۵ PHOSPHORUS INCREANIC TOTAL 15301L .005 L.003 L.003 L.003 L.003 .003 MG/L .001 L.003 .013 .011 011 15406L PHOSPHOROUS PHOSPHATE 900. .005 .005 TOTAL 019 013 900 L.003 L.003 013 .003 .017 ..003 007 MG/L 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0830 0845 1745 1400 1030 0840 0800 1630 0830 0830 1015 0060 0800 0800 SAMPLE DATE 0560 MST > 81 81 81 81 81 81 81 81 81 81 81 82 82 82 828 Σ 00 7 00 7 00 7 04 08 24 21 15 02 0 23 14 08 01 24 15

06104F	CARBON	DISSOLVED	ORGANIC	U	MG/L	2. 06L		1. 06L				1. 06L			2.	2. 06F
06902F	CARBON	ORGANIC	PARTICULATE	υ	MG/L	.11 02L		.14 02L		.21 02L		.24 02L		.41		.29
07902F	NITROGEN	PARTICUL.		z	MG/L	.01 02L		.04 02L		L.01 02L		.06 02L		.08		90.
10501	RESIDUE	FIXED	NONFILTR.		MG/L	11.	.1.	2.	2.	.1.	11	i.	.17	.17	. 2	
10401L	RESIDUE	NONFILTR.			MG/L	.11		4.	2.	.17	1	i		2.	4.	e,
02073L	TURBIDITY				טדנ	ņ	۰.	1.1	1.5	1.0	4.3	2.	٣.	2.8	5.6	2.5
020615	TEMPERATURE	PP	MATER		DEG.C.	.0	0.	0	0.	1. 61F		5. 61F	_	_	_	12. 61F
					10	_				0456		0456	0456	0456	0456	0426
			SAMPLE DATE	MST	M Y HR	80	80		80	04 80 1135	08	04 80 1225	80	80	80	05 80 0555

08 21 21 05 05 NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC UTM 11 689900E 5662700N 4 PP BP 9S LONG. 114D 17M 21S 5M STATION 00AT05BH2090 LAT. 51D BOW RIVER BELOW BEARSPAW DAM

06104F CARBON DISSOLVED ORGANIC C MG/L	2. 2. 04L 2. 04L 2. 04L	2. 04L	2. 04L 2. 04L 2. 04L	2. 04L 2. 04L 1.	.; ;		ĖĖ	4494
06902F CARBON ORGANIC PARTICULATE C MG/L	.20 02L .20 02L .22 02L	.13 02L	.29 02L .29 02L .24 02L	.30 02L .26 02L .32	.19		71.	.11
07902F NITROGEN PARTICUL. N MG/L	.03 02L .04 02L L.01 02L	.03 02L	.04 02L .05 02L .05 02L	.04 02L .04 02L .06 02L	40.0.00		600	.03
10501L RESIDUE FIXED NONFILTR. MG/L	L1. 2.0 3.0 5.0	э. о	44.4	. w . v. l. l 0	LI. 5.		L1.	::::::::::::::::::::::::::::::::::::::
10401L RESIDUE NONFILTR. MG/L	L1. 3.0 5.0 5.0	3.0	44.4	. 4 . 6.0 Li.			r n	iikij
02073L TURBIDITY JTU	2.2	3,3		2.3	1.5		2.0	1.0
02061S TEMPERATURE OF WATER DEG.C.	12. 61F	12. 61F 11.0 61F 11.0 61F 10.8 61F	10.5 61F 9.8 61F	9.5 61F 15. 61F 11. 61F	16.0 61F 15.5 61F 14.0 61F 15.5 61F	15.3 61F 15.4 61F 15.4 61F 15.3 61F 15.2 61F	15.0 61F 14.7 61F 14.5 61F 13. 61F	10. 61F 11. 61F 8. 61F 0. 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE NST D M Y HR	20 05 80 0600 02 06 80 0700 02 06 80 0701 02 06 80 0702 02 06 80 0703	02 06 80 1245 02 06 80 1330 02 06 80 1345 02 06 80 1430 02 06 80 1530	02 06 80 1730 03 06 80 0930 03 06 80 1100 03 06 80 1101 03 06 80 1102	03 06 80 1103 03 06 80 1104 03 06 80 1330 16 06 80 0715 01 07 80 0700	14 07 80 1400 28 07 80 0700 11 08 80 0730 11 08 80 1100	11 08 80 1530 11 08 80 1545 11 08 80 1630 11 08 80 1730 11 08 80 1900	11 08 80 2300 12 08 80 0300 12 08 80 0700 25 08 80 0700 08 09 80 0800	22 09 80 0730 06 10 80 0700 20 10 80 0830 03 11 80 0915

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 11 689900E 5662700N STATION 00ATOSBH2090 LAT. 510 5M 9S LONG. 1140 17M 21S PR 4 BOW RIVER BELOW BEARSPAW DAM

06104F CARBON DISSOLVED ORGANIC C	45444		ณ์ ค่ ค่ ณ่ ณ่				
06902F CARBON ORGANIC PARTICULATE C MG/L		.11 .20 .27 .06 .28	\$5. \$4. \$4.	.552 .522 .36	.27 .25 .17 .15	. 20	.08
07902F NITROGEN PARTICUL. N MG/L	L.01 .05 .05		00.000 00.000 00.000	. 05 L.01 . 03	4400.000.0000.000000000000000000000000	. 002 L. 013 . 02	.02 L.01
10501L RESIDUE FIXED NONFILTR.	°:'	°ėėėė	2. 12. 24. 24.	23. 23. 6.	i°°i	idddd	ėėėė
10401L RESIDUE NONFILTR.	11.014	%;;;;;	3. 27. 27. 26.	25 8 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	60491		iiii
02073L TURBIDITY JTU	चंत्र इ.स.च.स	म्स्त्रम्	2.6	11. 2.5 7.5	15. 2.5. 2.5. 3.4. 5.5. 5.5. 5.5. 5.5. 5.5. 5.5. 5	. 4 0 4 4 6 7 0 5 4	φ. φ. τ. φ.
02061S TEMPERATURE OF WATER DEG.C.	0. 61F .0 61F 0. 61F	3.0 61F 6.0 61F	8.0 61F 9.0 61F 9.0 61F 9.0 61F	9.0 61F 9.0 61F 9.0 61F 12.0 61F 13. 61F	13. 61F 13. 61F 16. 61F 7. 61F	6. 61F 2.0 61F .0 61F .0 61F	5.0 61F 5.0 61F 5.0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	03 11 80 0917 18 11 80 0800 08 12 80 1320 05 01 81 0800 26 01 81 0830	16 02 81 0800 09 03 81 0800 20 03 81 0900 06 04 81 0900 21 04 81 0800	04 05 81 0800 19 05 81 0915 01 06 81 0900 01 06 81 0905 01 06 81 0915	01 06 81 0920 01 06 81 0930 09 06 81 0830 30 06 81 0800 20 07 81 0845	20 07 81 0850 08 08 81 1745 24 08 81 1030 21 09 81 1400 15 10 81 1030	02 11 81 0840 23 11 81 0830 14 12 81 0800 08 01 82 0800 01 02 82 1630	24 02 82 0830 15 03 82 0830 05 04 82 1015 28 04 82 0900

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 11 689900E 5662700N 4 PR LONG. 114D 17M 21S 86 SM STATION 00AT05BH2090 LAT. 51D BOW RIVER BELOW BEARSPAW DAM

	14105L SILICA REACTIVE	SIO2 MG/L	4 K O 2 O	wwwww	ww444	3. v.		4 m m m a a a a	พ 4 พ พ ช 0 3 ณ	ынын 0 0 1 1 1 10
	17206L CHLORIDE DISSOLVED	CL MG/L	5.	2222	8 8 5 6 6 6	φ,φ,		0 0 0 0 0	v. v.«v.	6 t
	02041L SPECIFIC CCNDUCT.	US/CM	343. 356. 365. 367.	343. 323. 327. 293.	272. 271. 266. 270. 269.	268. 270. 267. 267. 267.	267. 267. 267. 267. 267.	266. 256. 258. 254. 254.	258. 267. 285. 276. 281.	286. 281. 291. 302.
	10151L ALKALINITY PHENOL	PHTHALEIN CACO3 MG/L	00000			o. o.		5.01	0,0,0	0.000
	10106L ALKALINITY TOTAL	CACO3	120. 120. 110. 100.	120. 01L 120. 01L 120. 01L 110. 01L	101. 01L 101. 01L 103. 01L 102. 01L	100. 01L		114. 01L 102. 01L 103. 01L 103. 01L	105. 01L 108. 01L 106. 01L	106. 01L 106. 01L 107. 01L 111. 01L
	06152F CARBON DISSOLVED	INORGANIC C MG/L	23. 53L 24. 52L 22. 53L 19. 52L 20. 53L	21. 52L 25. 53L 26. 52L 22. 53F 23.	21. 53F 20. 21. 52L 21. 52L 21. 52L	21. 52L 21. 52L		20. 52L 22. 52L 22. 52L 21. 52L	21. 52L 22. 22. 22.	22. 22. 23.
BELUW BEAKSPAW DAN	10301L PH	PH UNITS	0.00000		@ @ @ @ @ n n n n n n	00000 00000	00000 00000	លលលលល ឯកកំបក់កំ	00000 00000 00000	8 8 8 8 4 4 1 12
NO.		SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
BUM KIVEK BEL		SAMPLE DATE MST D M Y HR	10 03 80 0825 10 03 80 0830 24 03 80 1540 24 03 80 1545 08 04 80 1135	08 04 80 1140 21 04 80 1225 21 04 80 1230 05 05 80 0605 05 05 80 0610	20 05 80 0555 20 05 80 0600 02 06 80 0700 02 06 80 0701 02 06 80 0702	02 06 80 0703 02 06 80 1245 02 06 80 1330 02 06 80 1345 02 06 80 1430	02 06 80 1530 02 06 80 1730 02 06 80 2130 03 06 80 0130 03 06 80 0530	03 06 80 0930 03 06 80 1100 03 06 80 1101 03 06 80 1102 03 06 80 1103	03 06 80 1104 03 06 80 1330 16 06 80 0715 01 07 80 0700 14 07 80 1400	28 07 80 0700 11 08 80 0730 25 08 80 0700 08 09 80 0800

PAGE

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 11 689900E 5662700N PR 4 95 LONG. 114D 17M 21S SM STATION 00AT05BH2090 LAT. 51D BOW RIVER BELOW BEARSPAW DAM

14105L SILICA REACTIVE SIO2 MG/L	ынын й <i>г</i> йг,	**************************************	พพพพพ ฉฉฉพิจ	444ww 0404w	wwww.a ooano	4444	44 W W 4 W 0 L 0 W	N N N N N N N N N N N N N N N N N N N
17206L CHLORIDE DISSOLVED CL MG/L	00000	000000	40040	12710	6.6.6.1.1	0,0,0,0,0	12000	111.
02041L SPECIFIC CGNDUCT. US/CM	303. 301. 306.	306. 308. 307. 307.	312. 316. 327. 337.	355. 353. 338. 337.	342. 346. 341. 338.	269. 268. 269. 264. 271.	279. 305. 269. 269. 281.	285. 293. 312. 328.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000	00000	00000	00000		00000	0 % 0 0 0	0.000
10106L ALKALINITY TOTAL CACO3 MG/L	111. 01L 111. 01L 111. 01L 114. 01L	113. 011 114. 011 112. 011 115. 011	115. 011 118. 011 121. 011 119. 011	132. 011 125. 011 122. 011 121. 011	122. 01L 121. 01L 122. 01L 123. 01L	109. 01L 109. 01L 109. 01L 109. 01L	110.01L 122.01L 109.01L 110.01L	113. 01L 119. 01L 125. 01L 127. 01L
06152F CARBON DISSOLVED INDRGANIC C MG/L		27.	26. 27. 31. 32.	27. 23. 33. 31.	39. 28. 31.	255. 255. 255. 255.	26. 26. 27. 29.	28. 27. 30.
10301L PH PH UNITS	00000 00000	ซตตตต ผนหนาย	សល្លល់ល ឯឯសសល	88 88 51 15	<u> </u>	00000	๑๑๑๑๑ ๙๋ฉ๋ษ์ษ์๙๋	0000 5000
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST 45	09 09 80 1100 09 09 09 80 1101 00 09 09 80 1102 00 09 09 80 1103 01 02 00 0900 0900 0900 0900 0900 0900	12 09 80 0901 12 09 80 0902 12 09 80 0903 12 09 80 0904 22 09 80 0730	06 10 80 0700 0 20 10 80 0830 0 0 3 11 80 0915 0 0 1 18 11 80 0800 0 0 1 1 80 0800 0 0 0	08 12 80 1320 05 01 81 0800 026 01 81 0830 016 02 81 0800 009 03 81 0800 009	20 03 81 0900 06 06 04 81 0900 0 021 04 81 0800 0 04 05 81 0800 0 19 05 81 0915 0	01 06 81 0900 01 06 81 0905 001 06 81 0915 001 06 81 0920 001 06 81 0930 001 06 81 0930 001 06 81 0930 001 001 001 001 001 001 001 001 001 0	09 06 81 0830 0 30 06 81 0800 0 20 07 81 0845 0 20 07 81 0850 0 08 08 81 1745 0	24 05 81 1030 (21 09 81 1400 (15 10 81 1030 (02 11 81 0840 (03)

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05BH2090 LAT. 51D 5M 9S LONG. 114D 17M 21S PR 4 UTM 11 689900E 5662700N BOW RIVER BELOW BEARSPAW DAM

14105L SILICA REACTIVE SIO2	3.6	4.0	4 4 H W	мии
17206L CHLORIDE DISSOLVED CL	MG/L 1.4	7.7	n n	
02041L SPECIFIC CONDUCT.	US/CM 332.	338.	338. 334.	326. 321. 295.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	MG/L	0, 0,	င့် င့	000
10106L ALKALINITY TOTAL CACO3	MG/L 133. 01L	137. 01L 143. 01L		130. 01L 130. 01L 120. 01L
06152F CARBON DISSOLVED INORGANIC	MG/L 23.	33.	29. 36.	31. 32. 22.
10301L PH	PH UNITS	8.1	8 8 1.3	8 8 9 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
SUBM	1D 0426	0426	0426	0426 0426 0426
SAMPLE DATE	M	14 12 81 0800 08 01 82 0800	02 82 02 82 0	15 03 82 0830 05 04 82 1015 28 04 82 0900

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 11 695350E 5664400N PR 3 STATION 00AT05BH2105 LAT. 51D 6M 0S LONG. 114D 12M 36S BOW RIVER AT 85ST. BRIDGE CALGARY

07506L NITROGEN TOTAL AMMONIA N	::::::	:::::	:::::					
07110F NITROGEN DISSOLVED NO3 & NO2 N	.01 19F .01 .02 19F .02 .13 19F	.08 .05 19F .05 19F	.02 19F .04 .03 19F	.03 .01 .01 .02	.01 19F .01 .03 19L .03 10L	.07 10L .11 19L .12 10L .09 19L	.08 19L .08 10L .02 .02	.02
07661F NITROGEN DISSOLVED N MG/L	.07 51F .07 51F .07 51F	.17 51F .11 .09 51F .13	.06 .10 51F .06	.10 51F .05 51F .17 51F	.12 .06 51F .07 61L .09 51L .10 61L	.12 51L .14 61L .14 51L .18 61L .15 51L	.15 61L .13 51L .05 51F .06 51F	.05 51F .06 51F .04 51F
15256F PHOSPHORUS DISSOLVED CRIHO PO4 P MG/L	L.003 66F L.003 L.003 66F L.003 L.003 66F	L.003 L.003 L.003 L.003 6.003	L.003 66F L.003 66F L.003 66F L.003 66F	L.003 L.003 L.003 L.003 L.003	L.003 66F L.003 66L L.003 56L L.003 56L	L.003 55L L.003 66L L.003 66L L.003 66L L.003 55L	L.003 66L L.003 56L L.003 L.003	L.003 L.003 L.003
15356F PHOSPHORUS DISSOLVED INORG, PO4 P	L.003 46F L.003 L.003	L.003 L.003 L.003 L.003 46F L.003	L.003 46F .004 L.003 46F L.003	L.003 L.003 L.003 46F L.003 46F L.003	L.003 46F L.003 L.003 46L L.003 56L	L.003 56L L.003 46L L.003 56L L.003 56L L.003 56L	L.003 46L L.003 56L	
15103F PHOSPHORUS DISSOLVED P MG/L	L.003 13F L.003 .003 13F L.003	L.003 .008 13F .004 L.003 13F L.003	.004 13F .004 .003 13F L.003	.004 .003 13F .006 L.003 13F L.003	L.003 13F L.003 L.003 13L .004 03L	L.003 03L L.003 13L .004 03L .003 13L	L.003 13L L.003 03L L.003 L.003	L.003 L.003 L.003
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	L.003 .005 .006	L. 003 C. 005 C. 003	L.003 .012 .004 L.003	L. 0033	L.0004	L.003 L.003	£ 000°.	
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.000 .003 .009 .003	.005 .009 .014 .007	.005 .006 .012 .007 L.003	.0066 .0038 .005	.004 L.003 .006 .006	L.003 .010 .016 .008		L.003 L.003 .005
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	14 05 79 1010 14 05 79 1015 28 05 79 0805 28 05 79 0840 11 06 79 0735	11 06 79 0800 25 06 79 0835 25 06 79 0855 09 07 79 1210 09 07 79 1230	23 07 79 1245 23 07 79 1300 05 08 79 0705 05 08 79 0720 20 08 79 1130	20 08 79 1145 23 09 79 1230 23 09 79 1235 08 10 79 1125 08 10 79 1130	28 10 79 1455 28 10 79 1500 18 11 79 1255 18 11 79 1300 09 12 79 1640	09 12 79 1645 07 01 80 1425 07 01 80 1430 28 01 80 1140 28 01 80 1145	18 02 80 1210 18 02 80 1215 27 10 80 0815 27 10 80 1200 27 10 80 1600	27 10 80 1615 27 10 80 1700 27 10 80 1800 27 10 80 2000

PAGE II

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3 UTM 11 695350E 5664400N 0S LONG. 114D 12M 36S STATION ODATOSBH2105 LAT. 51D 6M BOW RIVER AT 85ST. BRIDGE CALGARY

07506L NITROGEN TOTAL AMMONIA N	
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	
07661F NITROGEN DISSOLVED N MG/L	712 500 713 511 714 715 715 715 715 715 715 715 715 715 715
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	C C C C C C C C C C C C C C C C C C C
15356F PHOSPHORUS DISSOLVED INORG, PO4 P	
15103F PHOSPHORUS DISSOLVED P MG/L	L. 0003 L. 000
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	L. 0003 L.
SUBM	00000 0000 0000 0000 0000 0000 0000 0000
SAMPLE DATE MST D M Y HR	28 10 80 0000 28 10 80 10 80 0000 28 10 80 0800 05 01 81 1200 05 01 81 1200 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 81 1800 05 01 00 00 00 00 00 00 00 00 00 00 00 00

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 11 695350E 5664400N м PR STATION 00AT05BH2105 LAT. 51D 6M 0S LONG. 114D 12M 36S BOW RIVER AT 85ST. BRIDGE CALGARY

06104F CARBON DISSOLVED ORGANIC C						2. 06L 2. 04L 1. 06L 1. 04L	1. 06L	
06902F CARBON ORGANIC PARTICULATE C						.32 02L .11 02L	.11 02L	
07902F NITROGEN PARTICUL. N MG/L	.05	.03	.03	.09 L.01	.39 .04 02L .03 02L	.04 02L	.03 02L	
10501L RESIDUE FIXED NONFILTR.	 	.:::::	 4 7	:::::::	iiiii	i**:i:	ii	
10401L RESIDUE NONFILTR. MG/L	ri เพ่าห่าง่	w v w 4 H	[]. []. []. []. [].	jäääää	i∺ii	14411	ii	
02073L TURBIDITY JTU	0 8 8 4 8 1 4 8 6 5	0 V O 0 0 0 0 0 0 0	ம் வ் ஸ்	25. L. S.	2	R. H. H. 8.0.04H	ດໍ າ ບໍ່	
02061S TEMPERATURE OF WATER DEG.C.	6. 12.5 12.5	12. 14. 16.	15.5 16.5 14.5 16.5	16. 13. 11.	,, , , , , , , , , , , , , , , , , , ,		0. 0. 4.0 61F 5.0 61F 6.0 61F	6.0 61F 5.0 61F 5.0 61F 4.0 61F
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SAMPLE DATE NST D M Y HR	14 05 79 1010 14 05 79 1015 28 05 79 0805 28 05 79 0840 11 06 79 0735	11 06 79 0800 25 06 79 0835 25 06 79 0855 09 07 79 1210 09 07 79 1230	23 07 79 1245 23 07 79 1300 05 08 79 0705 05 08 79 0720 20 08 79 1130	20 08 79 1145 23 09 79 1230 23 09 79 1235 08 10 79 1125 08 10 79 1130	28 10 79 1455 28 10 79 1500 18 11 79 1255 18 11 79 1300 09 12 79 1640	09 12 79 1645 07 01 80 1425 07 01 80 1430 28 01 80 1140 28 01 80 1145	18 02 80 1210 18 02 80 1215 27 10 80 0815 27 10 80 1200 27 10 80 1600	27 10 80 1615 27 10 80 1700 27 10 80 1800 27 10 80 2000

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 004T05BH2105 LAT. SID 6M OS LONG. 114D 12M 36S FR 3 UTM 11 695350E 5664400N BOW RIVER AT 85ST. BRIDGE CALGARY

06104F CARBON DISSOLVED ORGANIC C				
06902F CARBON ORGANIC PARTICULATE C				
07902F NITROGEN PARTICUL. N MG/L				
10501L RESIDUE FIXED NONFILTR.				
10401L RESIDUE NONFILTR. MG/L				
02073L TURBIBITY JTU				
02061S TEMPERATURE OF WATER DFG.C.		0.000000000000000000000000000000000000	1.0 61F 1.0 61 1.0 61F 1.0 61F 2.5 61F 3.5 61F	3.5.5.61 3.5.5.61 3.5.61 3.0.00 3.00
SUBM	0456 0426 0426 0426 0426 0426	00 00 00 00 00 00 00 00 00 00 00 00 00	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426
SAMPLE DATE	10 80 10 80 10 80 01 81 01 81 01 81	05 01 81 1800 05 01 81 2000 06 01 81 0000 06 01 81 0600 23 03 81 1200 23 03 81 1600 23 03 81 1615 23 03 81 1615 23 03 81 1815	03 03 03	08 03 82 1615 08 03 82 1700 08 03 82 2000 08 03 82 2000 09 03 82 0000 09 03 82 0000

14

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2 PAGE

STATION OOATO5BH2105 LAT. 51D 6M OS LONG. 114D 12M 36S PR 3 UTM 11 695350E 5664400N Bow River at 85ST. Bridge Calgary

W								
14105L SILICA REACTIVE SIO2 MG/L						4444 W G O W	44.	
17206L CHLORIDE DISSOLVED CL MG/L								
02041L SPECIFIC CONDUCT. US/CM	325. 324. 312. 314. 241.	262. 256. 260. 241.	236. 247. 233. 268.	254. 273. 302. 292. 311.	321. 323. 331. 330.	381. 385. 35≊. 365.	371. 381. 330. 318.	318. 319. 318. 320.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	0.0.0	00000	.0 .0 .02. .7.	6,6,6,6	0 000	00000		
10106L ALKALINITY TOTAL CACO3	115. 117. 110. 110.	92. 93. 84.	89. 87. 90. 93.	95. 99. 107. 121. 120.	115. 116. 115. 117.	98. 132. 132. 122.	. 96.	
06152F CARBON DISSOLVED INDRGANIC C						32. 53L 33. 52L 30. 53L	25. 53L 26. 52L	
10301L PH PH WNITS	888	8 7 7 8 8 9 1 1 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0	40000	00000 W4WW0	8 8 8 8 8 8 9 9 9 9	00000 H 0 M 4 4	0000
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	14 05 79 1010 14 05 79 1015 28 05 79 0805 28 05 79 0840 11 06 79 0735	11 06 79 0800 25 06 79 0835 25 06 79 0855 09 07 79 1210 09 07 79 1230	23 07 79 1245 23 07 79 1300 05 08 79 0705 05 08 79 0720 20 08 79 1130	20 08 79 1145 23 09 79 1230 23 09 79 1235 08 10 79 1125 08 10 79 1130	28 10 79 1455 28 10 79 1500 18 11 79 1255 18 11 79 1300 09 12 79 1640	09 12 79 1645 07 01 80 1425 07 01 80 1430 28 01 80 1140 28 01 80 1145	18 02 80 1210 18 02 80 1215 27 10 80 0815 27 10 80 1200 27 10 80 1600	27 10 80 1615 27 10 80 1700 27 10 80 1800 27 10 80 2000

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION GOATOSBH2105 LAT. 51D 6M OS LONG. 114D 12M 36S PR 3 UTM 11 695350E 5664400N BOW RIVER AT 85ST. BRIDGE CALGARY

14105L SILICA REACTIVE SIO2	MG/L																										
17206L CHLORIDE DISSOLVED CL	MG/L																										
02041L SPECIFIC CONDUCT.	US/CM	319.	320.	351.	350.	350.	352.	349.	349.	345	,38.	336.	337.	344.	342.	345.	340.	315.	311.	314.	316.	312.		315.	313.	310.	313.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	MG/L																										
10106L ALKALINITY TOTAL CACO3	MG/L																										
06152F CARBON DISSOLVED INORGANIC	MG/L																										
10301L PH	PH UNITS	0 0 n n	0 0 0 0	8 . 2 .	8.5	0 0 0 0	8.3	8.2	00 00	, w	φ. Υ	0 e	o o	8.3	8.1	8.2	00 0 01 0	9 0.0	8.1	8.1	8.1	W .	8.1	8.0	8.0	8.0	8.0
<u> </u>	ID	0426	0426	0456	0426	0456	0426	0426	0426	0456	0426	0426	0426	0426	0456	9250	0426	0450	0456	0426	0456	0456	0456	0426	0426	0456	0456
SAMPLE DATE	D M Y HR	28 10 80 0000	10 80	01 81	81	01	05 01 81 1800 05 01 81 2000	0000 81 0000	06 01 81 0400	81	23 03 81 1200	81	23 03 81 1615	81	03	03 81	24 03 81 0400	03 82	03	03	03 82	03 82	03 82	08 03 82 2000	03 82	82	03

-1

NAQUADAT DETAILED REPORT P AND N FORMS PLUS TEMP PH COND LONG. 114D OM 15S FR 3 UTM 11 710150E 5654650N PLANT EFFLUENT TO BOW RIVER - GRAB STATION 20AL05EH8500 LAT. 51D 0M 25S CALGARY - BONNYBROOK SEWAGE TREATMENT

	02041L SPECIFIC CONDUCT.	US/CM	1000. 41F		1150. 41F			1050. 41F	1050. 41F		920. 41F			1050. 41F			1000. 41F			20	855	957.	. 4/6	986.	. 366	1000.	886	871.	1	, 1/0°	940.	945.	. 965	905.	919.	829.	
	10301L PH	PH UNITS	7.3 01F	7.4 01F	7.4 01F	7.4 01F	7.4 01F	7.3 OIF		7.3 01F	7.5 01F		7.5 OIF	7.5 01F	1000	7.5 OIF	7.4 UIF	7.4 01F	7.5 01F	1	7.0	7.7	7.7	7.8	7.7	1.,	7.7	7.7	,	0.1	7.8	7.7	7.9	7.8	7.7	8.0	
	02061S TEMPERATURE OF WATER	DEG.C.	14.0 61F	15.0 61F	15.0 61F	15.0 61F	15.0 61F	15.0 61F	15.0 61F	15.0 61F	17.7 61F	17.4 61F	18.0 61F	18.0 61F	200	18.2 61F	18.4 61F	18.5 61F	18.1 61F	0		17.0 61F	17.0 61F	17.0 61F	17.0 61F	17.0 0.71 16.0 61F	16.0 61F	16.0 61F									
- GKAB	YED VED		51F	51F 51F	51F	51F	51F	51F 51F	715	51F	51F	51F	51F	51F	i	516	715	515	511	1	515	51F	51F	51F	51F	715	515	51F	ii ii	515	SIF	51F	51F			51F	
M KIVER	07661F NITROGEN DISSOLVED N	MG/L	8.8	17.	18.	19.	18.	18.	18	19.	13.	11	14.	14.	į	13.	14.	0	7.5	,	1 1	16.	15.	14.	14.	16.		12.	c	16.	20.	20.	7.8	18.	17.	9.6	
PLANT EFFLUENI 10 BUW RIVER - GRAB	15256F PHOSPHORUS DISSOLVED ORTHO PO4	MG/L	2.0	2.9	, r.	3.6	3.9	0.4	0 1	3.0	3.9	3.0	3.6	3°9 4°9	9.	6.0	0.4	, w	.55 56L	1	٠,٢	1 4. W	3.6	3.8	4.2	3 t	9 4	2.9	ć	5. 7.0	n w	3.8	1.6	3.5	9.0		
PLANT	eus Ved																		03L																		
	15103F PHOSPHORUS DISSOLVED	MG/L	2.2	3.0	i in	3.6	4.0	9 4	, k	3.0	4.0	3.0	3.6	. u	0	4.0	1.4	, w	2 4	,	9 6	, W.	3.7	3.9	4.2	0 c	9	2.9	Č	9 6	N 0,	3.0	1.6	3.5	3.6	3.5	
7Y - BONNYBROOK SEWAGE TREATMENT SI 124 RI W5M	15406L PHOSPHOROUS TOTAL PHOSPHATE	MG/L	2.2	ы ы п	3.7	3.8	4.2	0.0	† c	3.5	4.4	3.2	4.2	4 4	ı t	4.4	ф. Ф.	9.0	2.5	,	-i u	, M	4.1	0.4	4.6	ru n	, n	9.0	•	3.0	t 0.4	4.2	2.0	3.8	0.4		
BROOK 1 W5M	<u> </u>	ID	0426	0426	0456	0456	0426	0426	0420	0456	0426	0426	0456	0426	0470	0456	0426	0750	0426		0426	0426	0426	0426	0426	0426	0750	0426		0426	0456	0426	0426	0456	0426	0426	
CALGARY - BONNY SW1/4 SI T24 R	SAMPLE DATE	D M Y HR	08 90	09 06 80 1500	0091 00 90	06 80 1700	90	09 06 80 2300	9 2	08 90	08 80	08 80 1100	08 80 1500	05 08 80 1515	08 80	90	08 80 1900	0020 00 00	0700	;	2 5	10 80	06 10 80 1515	10	10	10 80 1900	0020 00 01				1558	01 81 1615	01 81 1700	01 81 1800	2001	01 81 0400	

P AND N FORMS PLUS TEMP PH COND

LONG. 114D OM 15S PR 3 UTM 11 710150E 5654650N PLANT EFFLUENT TO BOW RIVER - GRAB STATION 20ALO5BH8500 LAT. 510 0M 25S CALGARY - BONNYDROOK SEWAGE TREATMENT SW1/4 SI T24 RI W5M

02041L SPECIFIC CONDUCT.	US/CM	824.	865.	856.	. 496	977.	997.	.696	997.	1008.	829.	861.
10301L	PH UNITS	7.9	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
02061S TEMPERATURE OF WATER	DEG.C.			9.0 6IF	10.0 61F	10.0 61F	9.0 61F	10.0 61F	11.0 61F	11.0 61F	9.0 61F	9.0 61F
F VED		51F	51F	51F	SIF	51F	51F	51F	SIF	51F	SIF	51F
07661F NITROGEN DISSOLVED N	MG/L	11.	20.	19.	23.	25.	24.	26.	26.	25.	17.	18.
15256F PHOSPHORUS DISSOLVED ORTHO PO4	P MG/L	3.2	2.8	2.8	2.8	3.0	w 0.0	3.2	3.2	3.4	2.6	2.8
15103F PHOSFHORUS DISSOLVED	MG/L	3.2	2.8	2.8	3.0	3.2	3.2	3.2	3.2	3.6	2.8	2.8
15406L PHOSPHOROUS TOTAL PHOSPHATE	P MG/L	3.2	3.0	2.8	3.0	3.2	3.4	3.4	4.0	3.6	2.8	2.8
	SUBM	9250	0426	0426	0426	0456	0426	0426	0426	0426	0426	0426
SAMPLE DATE	D M Y HR	10	03 81	03	25 03 81 1600	03 81	03	03 81	03 81	26 03 81 0000	03 81 (26 03 81 0800

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 293600E 5637600N 4 ద 0.5 STATION 00AT05BM2160 LAT. 50D 51M 18S LONG. 113D 56M BOW RIVER STIERS RANCH

	07506L NITROGEN TOTAL AMMONIA N MG/L	2.0 1.6 1.6	4444	စ် <u>ထံ ကုံ စံ</u>		ĸ.	ە ښښښ 		٠ ١ ١ ١
	07110F NITROGEN DISSOLVED NO3 & NO2 N	.68 19L .68 10L .68 19L .64 10L .60 19L	.55 10L .45 19L .44 10L .50 19L	.45 19L .45 10L .46 19F			000 000 000 000 000 000 000 000 000 00	0 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	. 25
	07661F NITROGEN DISSOLVED N	2.0 51L 2.0 61L 2.0 51L 1.6 61L	1.8 51L 2.6 61L 2.7 51L 1.7 61L 1.8 51L	1.3 61L 1.3 51L 1.07 .99 51F	.99 51F 1.12 51F 1.14 51F 1.15 51F 1.3 51F	1.4 51F 1.3 51F 1.04 51F .86 51F	1.3 51F .79 51F .80 51F .78 51F	.74 51F .83 51F .84 51F .84 51F	.94 .51 .84
	15256F PHOSPHORUS DISSOLVED ORTHO PO¢ P MG/L	.26 66L .27 56L .25 66L .27 56L .25 66L	.25 56L .27 66L .26 56L .21 66L	.16 66L .14 56L .14 66F .11	.15 .15 .15 .16	.16 .15 .12 .10	.068 .11 .096 .10	113	.044 L.003 .013
	15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.28 46L .28 56L .28 56L .28 56L .26 46L	.26 56L .28 46L .26 56L .22 46L .21 56L	.18 46L .16 56L .15 46F		.12 46F	.099	112	.020
	15103F PHOSPHORUS DISSOLVED P MG/L	.29 13L .29 03L .34 13L .28 03L	.27 03L .28 13L .28 03L .23 13L .23 03L	.19 13L .17 03L .15 13F .16	.19	.20 .19 .16 .14	.16 .12 .13	.13 .15 .15 .15	.038 .038 .094
	15301L PHOSPHORUS TOTAL INORGANIC P MG/L	3.1 2.8 2.3 2.3 2.8 3.0	. 29 . 30 . 31 . 28			.16	.17	.17	.12 .060 .015
ANCH	15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	2 m m m m m m m m m m m m m m m m m m m	22. 3.3. 4.0. 6.2.	.25 .20 .20 .21	22	.26 .26 .22 .20	.19	2002.20	.14 .070 .10
STIERS R	SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
BOW RIVER ST	SAMPLE DATE MST D M Y HR	28 01 80 0940 28 01 80 0945 18 02 80 0955 18 02 80 1000 10 03 80 1135	10 03 80 1140 24 03 80 1355 24 03 80 1400 08 04 80 0955 08 04 80 1000	21 04 80 0955 21 04 80 1000 05 05 80 0935 05 05 80 0940 05 05 80 1150	05 05 80 1500 05 05 80 1900 05 05 80 1915 05 05 80 2000 05 05 80 2100	05 05 80 2300 06 05 80 0300 06 05 80 0700 06 05 80 1100 20 05 80 0955	20 05 80 1000 20 05 80 1030 20 05 80 1031 20 05 80 1033 20 05 80 1033	20 05 80 1034 20 05 80 1400 20 05 80 1401 20 05 80 1402 20 05 80 1403	02 06 80 0700 16 06 80 1000 01 07 80 1000 14 07 80 1130

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 4 UTM 12 293600E 5637600N STATION GOATGEBH2160 LAT, 50D 51M 185 LONG. 113D 56M 05 BOW RIVER STIERS RANCH

07506L NITROGEN TOTAL AMMONIA N MG/L	м		4 10 10	v		5.4.4.8	ø.	
07110F NITROGEN DISSOLVED NO3 & NO2 N	1.1		1.1	1.3	22,000,000	1.3 1.1 .80 .85	64.	
07661F NITROGEN DISSOLVED N MG/L	1.1 51F 1.2 .93 51F 1.0 51F	1.2 51F 1.24 51F 1.36 51F 1.38 51F 1.45 51F	1.40 51F 1.1 1.7 1.6 1.6	1.6 1.3 51F 1.2 51F 1.1 51F 1.3 51F	1.3 51F 1.4 51F 1.5 51F 1.5 51F	1.4 51F 1.2 1.6	1.3 .95 51F .95 51F .95 51F 1.0 51F	1.1 1.2 1.2 51F 1.2 51F
15256F PHOSPHORUS DISSOLVED ORTHO PO¢ P	.092 .068 .10 .14	113 113 120 120	.22 .12 .12 .16	.20 .16 .15	.18 .19 .20	. 18 118 118 135 135	. 18 . 20 . 24 . 24	2. 2. 2. 2. 2. 2. 2. 3. 4. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.10		. 13 . 20 . 20	25.		.20 .18 .25	.19	
15103F PHOSPHORUS DISSOLVED P MG/L	.1212	.17 .16 .17 .18	. 155 . 155 . 156 . 156	. 24 . 17 . 16 . 16	118	. 25 . 22 . 24 . 34 . 37	22. 22. 22. 25. 25. 25.	. 25 . 25 . 25
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.13		1. 2. 2. 2. 2.	. 25 5		.18 .18 .28	.25	
15406L PHOSPHOROUS TOTAL PHOSPHATE P HG/L	. 14 114 117 118	.18 .18 .20 .25	.25	.27 .20 .20 .20	22.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	2.2.2.2.2.3.4.3.5.4.5.5.4.5.5.4.5.5.4.5.5.5.5.5.5	2.5.5.2.5.2.5.2.2.8.8.2.8.8.8.8.8.8.8.8.	. 30 . 28 . 29 . 31
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	28 07 80 0700 28 07 80 1030 28 07 80 1100 28 07 80 1500 28 07 80 1900	28 07 80 1915 28 07 80 2000 28 07 80 2100 28 07 80 2300 29 07 80 0300	29 07 80 0700 11 08 80 0950 25 08 80 1000 08 09 80 1000 22 09 80 1000	06 10 80 1000 13 10 80 0700 13 10 80 1100 13 10 80 1500 13 10 80 1900	13 10 80 1915 13 10 80 2000 13 10 80 2100 13 10 80 2300 14 10 80 0300	14 10 80 0700 20 10 80 1100 03 11 80 1400 18 11 80 1000 08 12 80 1130	05 01 81 1214 12 01 81 0800 12 01 81 1200 12 01 81 1600 12 01 81 2000	12 01 81 2015 12 01 81 2100 12 01 81 2200 13 01 81 0000

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 293600E 5637600N 4 PR B STATION 00AT05BM2160 LAT. 50D 51M 18S LONG. 113D 56M 0S BOW RIVER STIERS RANCH

07506L NITROSEN TOTAL AMMONIA N	e, ii 6, 4, 8	;		1.20.	τ. ε.	:::::		.1
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	4 4 4 0 0	.50		04. 88. 88. 18.	2.0 .30 .35 .18	7.1. 38. 38. 38.	.36 .26 .24 .26 .29	.33 10L .83 .47 .36
07661F NITROGEN DISSOLVED N MG/L	1.4 51F 1.5 51F .97	1.8 1.6 51F 2.2 51F 2.2 51F 2.3 51F	2.3 51F 2.5 51F 2.6 51F 2.7 51F 2.7 51F	2.4 51F 1.9	69.	.50 .48 83	18.	. 91
15256F PHOSPHORUS DISSOLVED ORTHO PO4 MG/L	.28 .17 .18	.20 .30 .31	.31 .30 .30	.29 .20 .20 .29 56L .25 56L	.26 .039 56L .050 56L .074	.012 56L .019 .024 .024	.026 .033 56L .046 56L .026 56L	.056 56L .048 .086
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	. 22.	.19		.20	.087	.033 .033 .029	.032	.050
15103F PHOSPHORUS DISSOLVED P MG/L	. 23 1.25 2.1 2.22	25.5 25.5 25.5 25.5 25.5 25.5 25.5 25.5	<u> </u>	.30 .20 .31 03L .36 03L	.28 .050 03L .066 03L .10	.019 03L .032 .036 .033	.036 .042 .062 03L .061 03L .035 03L	.067 03L .059 .087
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	. 22 24 72.	25.		.21	.32	.078 .079 .073	.083	060.
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 33 . 31 . 27 . 27	3444 4444 500		.37 72. 52.	.20	.097	.11	11:
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	13 01 81 0515 13 01 81 0800 26 01 81 1230 16 02 81 1200 09 03 81 1015	20 03 81 1215 30 03 81 0300 30 03 81 1200 30 03 81 1600 30 03 81 2000	30 03 81 2015 30 03 81 2100 30 03 81 2200 31 03 81 0000 31 03 81 0400	31 03 81 0800 06 04 81 1430 21 04 81 1300 04 05 81 1010 04 05 81 1030	04 05 81 1230 18 05 81 1305 18 05 81 1320 19 05 81 1450 31 05 81 0735	31 05 81 0737 02 06 81 0800 02 06 81 0805 02 06 81 0815 02 06 81 0816	02 06 81 0825 09 06 81 1030 15 06 81 0734 15 06 81 0735 29 06 81 1055	29 06 81 1105 30 06 81 1400 14 07 81 1050 14 07 81 1110

PAGE 38

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

STATION 00AT05BH2160 LAT. 50D 51M 18S LONG. 113D 56M 0S PR 4 UTM 12 293600E 5637600N BOW RIVER STIERS RANCH

07506L NITROGEN TOTAL AMHONIA N MG/L		L.1	1.1	L.1	w v		1111
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	. 48 . 32 . 70 . 32	. 288 . 339 . 744 . 744	1.52	1.8 1.8 1.6 1.8 4.9	1.1 1.7 1.86 1.8	0 1 1 2 1 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2.0
07661F NITROGEN DISSOLVED N MG/L	. 53	77.	1. 9.	2°.1	1. 9. 8.	1 0 0 1 0 0 4 6 0 4	2.2.1 2.1.4
15256F PHOSPHORUS DISSOLVED ORTHO PO¢ P MG/L	.028 .029 .033	.068 .033 .062 .070	.073 .16 .13	4555541 255541		114 229 233 200	.10
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.038	.072	č.	82	.24	.14 .28 .29 .26 .23	.12
15103F PHOSPHORUS DISSOLVED P MG/L	.041 .036 .051 .039	.080 .043 .074 .075		4 4 8 8 4 4 8 4 4 4 4 4 4 4 4 4 4 4 4 4	.18 .26 .17 .24	.16 .22 .32 .26 .26	.12
15301L PHOSPHORUS TOTAL INCRGANIC P MG/L	8880.	.13	.18	9 8.	15.	.17 .56 .43 .27	.35
15406L PHOSPHOROUS TOTAL PHOSPHATE P	760.	.13	.20	. 26	.35	.19 .58 .28 .27	34.
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426
SAMPLE DATE MST D M Y HR	20 07 81 1200 28 07 81 1100 28 07 81 1110 08 08 81 1630 11 08 81 1115	11 08 81 1125 23 08 81 1130 23 08 81 1145 24 08 81 1430 07 09 81 1100	07 09 81 1110 20 09 81 1100 20 09 81 1105 21 09 81 0915 04 10 81 1150	04 10 81 1200 15 10 81 0900 23 10 81 1445 23 10 81 1500 01 11 81 1210	01 11 81 1215 02 11 81 1200 12 11 81 1225 12 11 81 1235 23 11 81 1130	23 11 81 1200 14 12 81 0950 08 01 82 1000 01 02 82 1500 24 02 82 1130	15 03 82 1000 05 04 82 1120 28 04 82 1130

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 4 UTM 12 293600E 5637600N STATION 00AT05BM2160 LAT. 50D 51M 18S LONG. 113D 56M 0S BOW RIVER STIERS RANCH

06104F CARBON DISSOLVED ORGANIC C MG/L	1. 06L 1. 06L 1. 06L 1. 06L 1. 06L			,	. ં . ં . ં . ં	
06902F CARBON ORGANIC PARTICULATE C	.51 02L 1.1 02L 1.4 02L			т пппп т 4000	1.2 .91 .77 .82	.86
07902F NITROGEN PARTICUL. N MG/L	.08 02L 1.9 02L .20 02L	72.		.24 .21 .15 .15 .15	.18 21. 11.	.13
10501L RESIDUE FIXED NONFILTR.		10 67.5.		14. 54. 56.	10. 8. 9.	26.0 6.0 1.0 L1.
10401L RESIDUE NONFILTR. MG/L	Li. 5. 5.	10. 6. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.		16. 8. 17. 14.	13. 9. 7. 11.	29.0 7.0 2.0 11.
02073L TURBIDITY JTU	2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	100 H		2.0		17.0 1.7 2.0 1.5
02061S TEMPERATURE OF WATER DEG.C.	ณีเบื่อ เก็บ เก็บ	4. 2. 61F 2. 61F 7.0 61F 7. 61F	13.8 61F 13.5 61F 13.3 61F 13.0 61F 12.8 61F 11.5 61F 10.0 61F	15. 61F		11. 61F 13. 61F 15. 61F
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR					20 05 80 1034 20 05 80 1400 20 05 80 1401 20 05 80 1402 20 05 80 1403	02 06 80 0700 16 06 80 1000 01 07 80 1000 14 07 80 1130

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 4 UTM 12 293600E 5637600N STATION GOATGEBM2160 LAT. 50D 51M 18S LONG. 113D 56M OS BOW RIVER STIERS RANCH

06104F CARBON DISSOLVED ORGANIC C MG/L	i		સંસંસં≓	ດ			ณ่	
06902F CARBON ORGANIC PARTICULATE C	1.0		1.1 68 1.2 1.2.	\$8.		.57 .64 .93	. 83	
07902F NITROGEN PARTICUL. N MG/L	.20		. 20 . 20 . 20	.15		.08	M T	
10501L RESIDUE FIXED NONFILTR.	ių.		10.11.	Ė		ห่ณ่ห่ห่	ம்	
10401L RESIDUE NONFILTR. MG/L	ņ		14. t.	i		ት ሣ የ ነ	ó	
02073L TURBIBITY JTU	č,		1,500 1,000	1:1		W H G G	٥. د.	
02061S TEMPERATURE OF WATER DEG.C.	17.1 61F 16.0 61F 17.9 61F 20.4 61F 21.0 61F	20.8 61F 20.6 61F 20.5 61F 20.0 61F	17.5 61F 16.0 61F 13. 61F 13. 61F 11. 61F	12. 61F 10.0 61F 10.0 61F 11.0 61F	11.0 61F 11.0 61F 11.0 61F 11.0 61F	11.0 61F 8. 61F 0. 61F	0. 61F 1. 61F 1. 61F 1. 61F	1. 61F 1. 61F 1. 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	28 07 80 0700 28 07 80 1030 28 07 80 1100 28 07 80 1500 28 07 80 1900	28 07 80 1915 28 07 80 2000 28 07 80 2100 28 07 80 2300 29 07 80 0300	29 07 80 0700 11 08 80 0950 25 08 80 1000 08 09 80 1000 22 09 80 1000	06 10 80 1000 13 10 80 0700 13 10 80 1100 13 10 80 1500 13 10 80 1900	13 10 80 1915 13 10 80 2000 13 10 80 2100 13 10 80 2300 14 10 80 0300	14 10 80 0700 20 10 80 1100 03 11 80 1400 18 11 80 1000 08 12 80 1130	05 01 81 1214 12 01 81 0800 12 01 81 1200 12 01 81 1600 12 01 81 2000	12 01 81 2015 12 01 81 2100 12 01 81 2200 13 01 81 0000

PAGE 41

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 293600E 5637600N 4 ద 0.5 STATION 00AT05BM2160 LAT. 50D 51M 18S LONG. 113D 56M BOW RIVER STIERS RANCH

06104F CARBON DISSOLVED ORGANIC C MG/L	ฉ๋ฉ๋๋	'n		ณ่ณ่ณ่	i n	ஸ்ஸ் ச்ச் ஸ்		i
06902F CARBON ORGANIC PARTICULATE C MG/L	1.4 1 4.1	1.0		.68	1.1		1.1	1.2
07902F NITROGEN PARTICUL. N	.20	.15		.18	.28	.18 .15 .17 .25	.10	.13
10501L RESIDUE FIXED NONFILTR. MG/L	.ii.	12.		8. 168. 16.	128.	88 62: 649: 85:	24.	226.
10401L RESIDUE NONFILTR. MG/L	16. 10. 15.	14.		9. 179. 19.	138.	97. 69. 779. 90.	27.	114.
02073L TURBIDITY JTU	3 . u . u . s . u . u . s . u . u . u . u	o, m		w v n	25.	25.	21.	24.
02061S TEMPERATURE OF WATER DEG.C.	1. 61F	4.0 61F 4.0 61F 6.0 61F 5.0 61F	5.0 61F 5.0 61F 5.0 61F 4.0 61F	4.0 61F 5.0 61F 11.0 61F	11.0 61F 11.0 61F	10.0 61F	14.0 61F 14.0 61F 13.0 61F	16.0 61F 16.0 61F
SUBM ID	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST 60 MY HR	13 01 81 0515 13 01 81 0800 26 01 81 1230 16 02 81 1200 09 03 81 1015	20 03 81 1215 30 03 81 0800 30 03 81 1200 30 03 81 1600 30 03 81 2000	30 03 81 2015 30 03 81 2100 30 03 81 2200 31 03 81 0000 31 03 81 0400	31 03 81 0800 06 04 81 1430 21 04 81 1300 04 05 81 1230 18 05 81 1305	18 05 81 1320 19 05 81 1450 31 05 81 0735 31 05 81 0737 02 06 81 0800	02 06 81 0805 02 06 81 0815 02 06 81 0816 02 06 81 0825 09 06 81 1030	29 06 81 1055 29 06 81 1105 30 06 81 1400 14 07 81 1050 14 07 81 1110	20 07 81 1200 28 07 81 1100 28 07 81 1110 08 08 81 1630

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 293600E 5637600N PR 4 STATION 00AT05BH2160 LAT. 50D 51M 18S LONG. 113D 56M 0S BOW RIVER STIERS RANCH

06104F CARBON DISSOLVED ORGANIC C	ri	ŕ	เก๋	ં ંં	ณ่ ณ่ ณ่ ณ่ ณ่	4.3
06902F CARBON ORGANIC PARTICULATE C MG/L	1.2	1.0	.	4.5 .38 .52	2.3 8.3 7.5 7.5	2.2
07902F NITROGEN PARTICUL. N	.13	.14	21.	.08	4 4 6 6 4 4 8 6 6 8	.35
10501L RESIDUE FIXED NONFILTR.	42.	34.	22.	.11 .4.4	91. 13. 2. 91.	23.
10401L RESIDUE NONFILTR.	50.	°6°	24.	15. 6.	112. 16. 2. 3.	27. 52.
02073L TURBIDITY JTU	10.0	2.2	۲. پ	8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	8 5 5 5 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7	14.
02061S TEMPERATURE OF WATER DEG.C.	18. 61F 17. 61F 18. 61F 21.0 61F	15. 61F 15. 61F 14. 61F	9.5 61F 8. 61F 6. 61F 6. 61F	7. 61F 6. 61F	.0 61F .0 61F .0 61F .0 61F	.0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	11 08 81 1115 11 08 81 1125 23 08 81 1130 23 08 81 1145 24 08 81 1430	07 09 81 1100 07 09 81 1110 20 09 81 1100 20 09 81 1105 21 09 81 0915	04 10 81 1150 04 10 81 1200 15 10 81 0900 23 10 81 1445 23 10 81 1500	02 11 81 1200 12 11 81 1225 12 11 81 1235 23 11 81 1130 23 11 81 1200	14 12 81 0950 08 01 82 1000 01 02 82 1500 24 02 82 1130 15 03 82 1000	05 04 82 1120 28 04 82 1130

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 293600E 5637600N 4 PR B STATION 00AT05BM2160 LAT. 50D 51M 18S LONG. 113D 56M 0S BOW RIVER STIERS RANCH

14105L SILICA REACTIVE SIO2 MG/L	44W44 <	; 4 w 4 w u n o o o			4 WWW 9 944	www.u.u 4.64.01		
17206L CHLORIDE DISSOLVED CL MS/L		80 v	44WW 9 676 8 7 7 7		2. 0 0 0 . 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5	0477.74	4 L R & L	
02041L SPECIFIC CONDUCT. US/CM	4444. 4448. 4447. 420.	441. 440. 389. 395.	373. 369. 334. 328.	305. 310. 316. 306.	322. 310. 310. 309.	315. 314. 316. 330.	322. 336. 354. 360.	361. 351. 352.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000					0000	00000	
10106L ALKALINITY TOTAL CACO3 MG/L	141. 141. 109. 132.	120. 110. 130. 01L 130. 01L	130. 01L 130. 01L 120. 01L 120. 01L	105. 01L 106. 01L 101. 01L 107. 01L	106. 01L 105. 01L 107. 01L	112. 01L 112. 01L 113. 01L 114. 01L	108. 01L 113. 01L 114. 01L 120. 01L	
06152F CARBON DISSOLVED INORGANIC C MG/L	34. 53L 35. 52L 28. 53L 28. 53L 26. 53L	26. 52L 27. 53L 20. 52L 22. 53L 22. 52L	23. 53L 28. 52L 24. 53F 23.	ភ្លួននៃ		23. 25. 24.	2 4 4 5 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
10301L PH PH UNITS	00000	. 8 8 . 7 2 . 5 . 8	7.6 7.8 8.0 8.0 7.6	7.7 8.0 8.0	8 8 8 8 5 7 7 7 7	8.7.9 8.2.8 7.8	7.7 8.1 8.1 7.8	7.7 7.7 8.1
SUBM	0426 0426 0426 0426 0426	0456 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	002 003	24 03 80 1140 24 03 80 1450 24 03 80 1400 08 04 80 0955 08 04 80 1000	21 04 80 0955 21 04 80 1000 05 05 80 0935 05 05 80 0940 20 05 80 0955	20 05 80 1000 20 05 80 1030 20 05 80 1031 20 05 80 1032 20 05 80 1033	20 05 80 1034 20 05 80 1400 20 05 80 1401 20 05 80 1402 20 05 80 1403	02 06 80 0700 16 06 80 1000 01 07 80 1000 14 07 80 1130 28 07 80 1030	11 08 80 0950 25 08 80 1030 08 09 80 1000 22 09 80 1000 06 10 80 1000	13 10 80 0700 13 10 80 1100 13 10 80 1500 13 10 80 1900

PAGE 44

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2 PR 4 UTM 12 293600E 5637600N STATION OGATOSBH2160 LAT. SOD 51M 18S LONG. 113D 56M OS BOW RIVER STIERS RANCH

14105L SILICA REACTIVE SIO2 MG/L		0 m 4 4 0 m 4 4	4.1		, w w w			W W W W W
17206L CHLORIDE DISSOLVED CL MG/L		w 0 0 0 0 0 4 0	4.7		40N W Q Q Q			4 10 0 10 00 0 10
02041L SPECIFIC CONDUCT. US/CM	372. 371. 379. 376.	369. 366. 377. 397. 432.	401. 386. 386. 388. 395.	401. 400. 401. 403.	401. 376. 392. 384. 400.	379. 384. 397. 410. 411.	419. 420. 424. 424. 424.	384. 394. 403. 394.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L		0,0,0,0	0.		0,0,0			°.°.
10106L ALKALINITY TOTAL CACO3 MG/L		122. 01L 127. 01L 133. 01L 143. 01L	135. 01L		130. 01L 125. 01L 123. 01L 131. 01L			127. 01L 124. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L		333. 333.	. 56.		35. 35. 41.			32.
10301L PH PH UNITS	001.77	7.7	8.0	7.8	V V & & & & & & & & & & & & & & & & & &	7.7. 7.7. 7.7.	7.7.6 7.7.7 7.7.7	8 8 7 8 8 4 2 6 0
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	13 10 80 1915 13 10 80 2000 13 10 80 2100 13 10 80 2300 14 10 80 0300	14 10 80 0700 20 10 80 1100 03 11 80 1400 18 11 80 1000 08 12 80 1130	05 01 81 1214 12 01 81 0800 12 01 81 1200 12 01 81 1600 12 01 81 2000	12 01 81 2015 12 01 81 2100 12 01 81 2200 13 01 81 0000 13 01 81 0515	13 01 81 0800 26 01 81 1230 16 02 81 1200 09 03 81 1015 20 03 81 1215	30 03 81 0800 30 03 81 1200 30 03 81 1600 30 03 81 2000 30 03 81 2015	30 03 81 2100 30 03 81 2200 31 03 81 0000 31 03 81 0400 31 03 81 0800	06 04 81 1430 21 04 81 1300 04 05 81 1010 04 05 81 1030

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 293600E 5637600N 4 PR B 0.5 STATION GOATGEBM2160 LAT. 50D 51M 18S LONG. 113D 56M BOW RIVER STIERS RANCH

14105L SILICA REACTIVE SIO2 MG/L	8 W H & S	4 N N N 4	นูกันนูก อักษณะ	и 4 и у и пон оги	W W Y W W 9 F H Y W	WWWW POP40		80.8.5
17206L CHLORIDE DISSOLVED CL MG/L	0.0 K 4	4	8 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	W W W W W	1.5.5.1.5 7.5.6.5.5	1 0 0 0 0 8 4 6 0 7	444W4	7.8 6.7 6.7
SPECIFIC CONDUCT. US/CM	404. 371. 388. 390. 287.	287. 306. 303. 306.	302. 314. 313. 324.	333. 337. 299. 292.	289. 299. 312. 300.	301. 305. 313. 316.	325. 329. 343. 341. 348.	391. 392. 400. 368.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	o. o.	0000	0.0	° °.	0.	°.	0.	0.
10106L ALKALINITY TOTAL CACO3	131. 01L	121. 01L 121. 01L 118. 01L 123. 01L	122. 01L 121. 01L	126. 01L	117. 01L	117. 01L	124. OIL	132. 01L
06152F CARBON DISSOLVED INORGANIC C	34° 46° 4	28.8 28.8 27.	28.	27.	88.	28.	28.	28.
10301L PH PH UNITS	7.88.2 8.1 8.1 1.1	8.1 7.5 7.6 7.7	7.8 7.7 8.1 8.1	88888 4.0.8.8.0.0	0 0 0 0 0 n n 0 4 4	00000 NNO46	8.22 7.7 8.22 0.08	7.6
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE HST D M Y HR	04 05 81 1230 18 05 81 1305 18 05 81 1320 19 05 81 1450 31 05 81 0735	31 05 81 0737 02 06 81 0800 02 06 81 0805 02 06 81 0815 02 06 81 0815	02 06 81 0825 09 06 81 1030 15 06 81 0734 15 06 81 0735 29 06 81 1055	29 06 81 1105 30 06 81 1400 14 07 81 1050 14 07 81 1110 20 07 81 1200	28 07 81 1100 28 07 81 1110 08 08 81 1630 11 08 81 1115 11 08 81 1125	23 08 81 1130 24 08 81 1145 24 08 81 1430 07 09 81 1100	20 09 81 1100 20 09 81 1105 21 09 81 0915 04 10 81 1150 04 10 81 1200	15 10 81 0900 23 10 81 1445 23 10 81 1500 01 11 81 1210

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

PR 4 UTM 12 293600E 5637600N STATION COATOSEM2160 LAT. 50D 51M 18S LONG. 113D 56M OS BOW RIVER STIERS RANCH

14105L SILICA	REACTIVE	SIO2	MG/L	2.4	2.6	2.2	2.6	3.4	3.4	4.1	4.8	4.4	4.6	4.8	4.8	3.9
17206L CHLORIDE	DISSOLVED	CL	MG/L	4.6	5.4	4.7	5.5	7.4	7.4	7.0	0.6	5.5	8.5	13.	11.	7.5
02041L SPECIFIC	CONDUCT.		US/CM	377.	387.	370.	388.	388.	382.	412.	442.	389.	.004	422.	410.	353
10151L ALKALINITY	PHENOL	CACO3	MG/L		0.			0.	0.	0.	0.	0.	0.	0.	0.	0
LTY	_				016			011	011	016	OIL	016	011	01L	016	0.11
10106 ALKALIN	TOTAL		MG/L		133.			138.	136.	144.	149.	140.	140.	140.	145.	130.
06152F CARBON	DISSOLVED	U	MG/L		32.			24.	24.	35,	35.	31.	38.	34.	35.	24.
10301L PH			PH UNITS	8.2	7.5	8.5	8.2	7.5	7.4	7.3	7.5	7.5	7.6	7.6	7.8	7.7
		SUBM	ID	0426	0426	0426	0426	0426	0426	0426	0456	0426	0426	0426	0426	0426
				11 81 1215												
	LE	MST	>	81 1	81 1	81 1	81 1	81 1	81 1	81 0	82 1	82 1	82 1	82 1	82 1	82 1
	AMP		I	11	11	11	11	11	11	12	01	02	02	03	50	50
	S															

01 02 12 12 12 23

15 05 28

23 14 08 01 24 NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3 UTM 11 679350E 5640800N STATION 00AT055M2161 LAT. 50D 53M 34S LONG. 1140 27M 0S BOW RIVER AT HIGHWAY 22X, CALGARY

07506L NITROGEN TOTAL APPONIA N	ភ ់ ភ ់ ស ់ ស ់ ម	1	5. Z. L. 4. L.	1	9.1.22.1.	11.29	L.1 .2
07110F NITRGEN DISSOLVED NO3 & NO2 N MG/L	.23 19F .20 19F .20 .35 19F	.33 .48 19F .37 .42 19F	.78 19F .51 .94 19F .80	1.3 1.1 1.1 1.5 1.5 1.9F	1.3 19F 1.3 1.1 19L 1.1 10L .95 19L	.90 10L .75 19L .75 10L .46 10L	.32
07661F NITROGEN DISSOLVED N	.81 .87 51F .59 .64 51F	1.4 51F 1.7 1.0 .95 51F	1.2 .81 51F 1.18 1.00 51F	1.5 51F 1.9 51F 2.3 51F	2.5 2.5 3.5 61L 3.4 51L 3.8 61L	3.6 51L 2.2 61L 2.6 51L .80 61L	.25
15256F PHOSFHORUS DISSOLVED ORTHO PO4 P MG/L	.068 66F .077 .072 66F .078 .13 66F	.13 66F .18 66F .12 66F .13	.12 66F .13 66F .11 66F	.15 66F .29 66F .31 66F .31	.42 66F .43 66L .40 56L .40 56L	.42 56L .30 66L .22 56L .061 56L	.003
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.083 46F .077 .082 46F .082	.16 .20 46F .21 .14 46F .090	.12 46F .12 .10 46F .17	.15 .29 46F .33 46F .33	.45 46F .46 46L .46 56L .50 46L	.48 56L .32 46L .33 56L .068 56L .13 56L	.034
15103F PHOSPHORUS DISSOLVED P MG/L	.089 13F .077 .095 13F .095	.19 .22 13F .23 .14 13F .13	.16 .18 13F .14 .17 13F	.17 .31 13F .35 13F	.54 13L .48 03L .46 13L	.48 03L .32 13L .33 03L .087 03L .13 03L	.008
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.099	.21 .26 .27 .16	.16 .17 .20	.19 .29 .36 .34	44. 44.	.64 .36 .34 .077	.014
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 112 114 114 125	. 29 . 29 . 19 . 18	.19	25. 35. 36. 14. 24.	.50 .552 .855 .74	.76 .38 .36 .094	.014
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	14 05 79 1355 14 05 79 1430 28 05 79 1130 28 05 79 1215 11 06 79 1020	11 06 79 1050 25 06 79 1050 25 06 79 1110 09 07 79 0930 09 07 79 0950	23 07 79 0910 23 07 79 0925 05 08 79 1330 05 08 79 1345 20 08 79 0930	20 08 79 0945 23 09 79 1430 23 09 79 1450 08 10 79 1325 08 10 79 1330	28 10 79 1655 28 10 79 1700 18 11 79 1525 18 11 79 1530 09 12 79 1525	09 12 79 1530 07 01 80 1310 07 01 80 1315 14 07 80 1020 07 09 80 1015	06 07 81 1000 31 08 81 0940

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 11 679350E 5640800N PR 3 STATION ODATOSBH2161 LAT. 50D 53M 34S LONG. 114D 27M 0S BOW RIVER AT HIGHWAY 22X, CALGARY

06104F CARBON DISSOLVED ORGANIC C MG/L				3. 06L 2. 04L 1. 04L 2. 04L	2, 1,
06902F CARBON ORGANIC PARTICULATE MS/L				.98 02L .36 02L .43 02L	.22
07902F NITROGEN PARTICUL. N	21.13. 188. 188. 199.	.15 .08 .07	72.	.37 02L .38 02L .16 02L .06 02L	90.
10501L RESIDUE FIXED NONFILTR.	2. [1]. 10. 10. 3. 3.		જુનુંનું કે કે કે	*ja *jaak	
10401L RESIDUE NONFILTR. MG/L	8. 2. 12. 12. 6. 10.	4. 1. 2. 11.7	9 44	တ်တိုက် တိုက်ကိုလ်တိ	3.
02073L TURBIDITY	7.6 18.9.9 15. 15. 1.9 4.3	2.5 HI	11.7.7 1.6.4.4.4.5 1.0.0.1.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.	ଟ୍ଟାପ ପ୍ର ଜ୍ୟାପ ପ୍ର ଜ୍ୟାପ	
02061S TEMPERATURE OF WATER DEG.C.	11.5 11.5 13.5 12.5 14.5 14.5	15.5 15.5 17. 17.5 17.5 15.5	15.5 14. 14. 10. 2.	3. 3. 3. 0. 15.2 61F 14.7 61F	14.0 61F 14.0 61F
SUBM	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	14 05 79 1355 14 05 79 1430 28 05 79 1130 28 05 79 1215 11 06 79 1050 25 06 79 1050	07 79 07 79 07 79 08 79 08 79	08 79 09 79 09 79 10 79 10 79 10 79	18 11 79 1525 18 11 79 1530 09 12 79 1525 09 12 79 1530 07 01 80 1315 14 07 08 0 1020 07 09 80 1020	06 07 81 1000 31 08 81 0940

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

PR 3 UTM 11 679350E 5640800N STATION 00AT055M2161 LAT. 50D 53M 34S LONG. 114D 27M 0S BOW RIVER AT HIGHWAY 22X, CALGARY

14105L SILICA REACTIVE	SIO2 MG/L						មាល់ ១	3.6
17206L CHLORIDE DISSOLVED	CL MG/L						8 r.	H
02041L SPECIFIC CONDUCT.	US/CM	351. 354. 343. 342. 327.	327. 333. 331. 327. 326.	289. 300. 303. 323.	323. 352. 355. 391. 396.	422. 424. 435. 433.	454. 462. 310.	298.
10151L ALKALINITY PHENOL PHTHALEIN	CACO3 MG/L	•••	00000	12.00.00	00000	000 0	0.000 H	พ
10106L ALKALINITY TOTAL CACO3	MG/L	119. 116. 116.	111. 113. 110.	104. 103. 103.	103. 117. 114. 137.	137. 138. 140. 122.	122. 146. 144. 113. 01L	118. 01L 117. 01L
06152F CARBON DISSOLVED INORGANIC	C MG/L						35, 53L 35, 52L 22, 52L 23, 52L	27.
10301L PH	PH UNITS	8 8 8 1.0.1.	0.00.00	7 7 8 8 7 7 7 7 8 8 9 7	7.7 8.0 7.7 8.0	9.7.7.7.7	86778	8 8 6 70
	SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE	MST D M Y HR	14 05 79 1355 14 05 79 1430 28 05 79 1130 28 05 79 1215 11 06 79 1020	11 06 79 1050 25 06 79 1050 25 06 79 1110 09 07 79 0930 09 07 79 0950	23 07 79 0910 23 07 79 0925 05 08 79 1330 05 08 79 1345 20 08 79 0930	20 08 79 0945 23 09 79 1430 23 09 79 1450 08 10 79 1325 08 10 79 1330	28 10 79 1655 28 10 79 1700 18 11 79 1525 18 11 79 1530 09 12 79 1525	09 12 79 1530 07 01 80 1310 07 01 80 1315 14 07 80 1020 07 09 80 1015	06 07 81 1000 31 08 81 0940

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 08 611800E 5632150N LONG. 133D 24M 46S PR 3 UPSTREAM OF HIGHWAY #24 STATION 00AT05BM2215 LAT. 50D 49M 56S BOW RIVER BELOW CARSELAND WEIR

07506L NITROGEN TOTAL AMMONIA N	Hawaa	5 E 5 E E			וין ניי. 6	7.00.22	t	0.6.4
07110F NITROGEN DISSOLVED NO3 & NO2 N	.31 19F .32 .30 19F .30 .30	.55 .74 19F .78 .54 19F	.53 19F .50 .60 19F .80	.88 .96 19F .90 1.3 19F	1.7 19F 1.7 19L 1.7 19L 1.20 19L	1.6 10L 1.3 19L 1.2 10L 1.4 19L	1.2 19L 1.2 10L .80 19L 1.0 10L .86 19L	.86 10L .58 19L .56 10L .47 19L
07661F NITROGEN DISSOLVED N	.65 .65 51F .53 51F	.82 51F 1.2 1.0 51F .71 .82 51F	.65 .59 51F .80 .80 51F	.91 51F 1.1 1.1 51F 1.4 51F	2.0 2.0 51F 2.4 61L 2.0 51L 1.9 61L	2.0 511 2.2 611 2.3 511 2.4 611 2.0 511	1.8 61L 2.0 51L 1.7 61L 1.7 51L 1.8 61L	1.9 51L 1.5 61L 1.6 51L .92 61L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.039 66F .030 .047 66F .042 66F	.048 .086 66F .084 .080 66F	.080 66F .084 .061 66F .052	.11 .15 66F .17 66F	.24 66F .24 66L .22 66L .23 66L	.23 56L .24 56L .23 66L .23 66L	.22 66L .23 56L .21 66L .22 56L .23 66L	.24 56L .18 66L .18 56L .10 66L
15356F PHOSPHORUS DISSOLVED INORG, PO4 P	.044 46F .045 .042 46F .05	.043 .094 46F .094 .061 46F	.080 46F .075 .054 46F .068	.12 .15 46F .15 46F .17 46F	.25 46F .23 46L .22 56L .23 46L	.23 56L .25 46L .23 46L .23 46L	.23 46L .23 56L .22 46L .22 56L .24 46L	.25 56L .20 46L .19 56L .11 46L
15103F PHOSPHORUS DISSOLVED P MG/L	.043 13F .046 .058 13F .058 13F	.073 .11 13F .11 .082 13F	.11 13F .085 13F .074 .13 13F	.13 .16 13F .16 .19 .19 13F	.27 13F .27 13L .25 13L .23 03L	.25 03L .26 13L .26 03L .24 13L	.24 13L .23 03L .22 13L .22 03L	.25 03L .21 13L .21 03L .12 13L
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.070 .13 .12	.051	.091 .074 .075 .075	115 115 115 71	25.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.	2, 2, 2, 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,	ខ្មុំខ្មុំ	.37 .25 .16
15406L PHOSFHOROUS TOTAL PHOSFHATE P MG/L	.078 .092 .15	.075 .15 .13	.11	.20 .20 .21	2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	2,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5	26 26 26 35 35 35	. 29 . 29 . 19
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	15 05 79 0905 15 05 79 0945 29 05 79 0615 29 05 79 0645 12 06 79 0700	12 06 79 0725 26 06 79 0615 26 06 79 0635 09 07 79 0715 09 07 79 0730	23 07 79 0650 23 07 79 0705 05 08 79 1025 05 08 79 1040 21 03 79 0825	21 08 79 0830 24 09 79 0640 24 09 79 0645 09 10 79 0645 09 10 79 0645	29 10 79 0755 29 10 79 0800 19 11 79 0725 19 11 79 0730 10 12 79 0755	10 12 79 0800 07 01 80 1125 07 01 80 1130 28 01 80 0825 28 01 80 0830	18 02 80 0825 18 02 80 0830 10 03 80 0955 10 03 80 1000 24 03 80 0855	24 03 80 0900 08 04 80 0825 08 04 80 0830 21 04 80 0825

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

STATION 00AT05BM2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N BOW RIVER BELOW CARSELAND WEIR

07506L NITROGEN TOTAL AMMONIA N	4.1.4.		и'n	7		ů		L.1
07110F NITROGEN DISSOLVED NO3 & NO2 N	.47 10L .50 19F		.50	.30 10L .26 .68		8.		8 8 2
07661F NITROGEN DISSOLVED N MG/L	.84 51L .87 .67 51F .68 51F	.81 51F .79 51F .97 51F .97 51F	.93 51F .93 51F .99 51F .72	.64 61L .31 .72 .90	.89 51F .82 51F .76 51F .81 51F	.91 51F 1.1 51F .92 51F .99 51F	. 91 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	1.0 1.0 1.1 1.2 51F
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.093 56L .090 66F .087 .075	.056 .069 .041 .085	.051 .054 .070 .085 66F	.067 56L .018 .058 .047	.086 .096 .10 .10	.11 .10 .098 .11	.091 .091 .11 .11	.13
15356F PHOSPHORUS DISSOLVED INORG. PO4 P MG/L	.11 56L .10 46F .087		.085 46F	.073 56L .022		.078	.020	.14
15103F PHOSPHORUS DISSOLVED P MG/L	.12 03L .10 13F .11 .088	.088 .10 .10	.12 .099 .12 .088 13F	.076 03L .033 .11 .066	112 122 133	.13 .12 .14 .082	.12 .10 .12 .12	.15
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	. 177 41.			.033		.10	711	.15
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.30 .16 .13	.13 .15 .15	114 115 115 115	.094 .091 .091	.14 .15 .18 .16	.15 .15 .15 .17	.15 .11 .13 .15	.16 .13 .14
SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	21 04 80 0830 05 05 80 1315 05 05 80 1320 12 05 80 1300 12 05 80 1700	12 05 80 2100 13 05 80 0100 13 05 80 0500 13 05 80 0515 13 05 80 0600	13 05 80 0700 13 05 80 0900 13 05 80 1300 21 05 80 0855 21 05 80 0900	03 06 80 0830 16 06 80 1400 01 07 80 1230 14 07 80 0830 21 07 80 1200	21 07 80 1600 21 07 80 2000 22 07 80 0000 22 07 80 0400 22 07 80 0415	22 07 80 0500 22 07 80 0600 22 07 80 0800 22 07 80 1200 28 07 80 1245	11 06 80 1145 25 08 80 1230 08 09 80 1300 22 09 80 1215 22 09 80 1220	06 10 80 1200 20 10 80 1000 20 10 80 1245 20 10 80 1400

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N UPSTREAM OF HIGHMAY #24 STATION 00AT05BH2215 LAT. 50D 49M 56S BOW RIVER BELOW CARSELAND WEIR

07506L NITROGEN TOTAL AMMONIA N		5.6	4.0		, i			1. 1. 6. 1. 3. 0 5. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.
07110F NITROGEN DISSOLVED NO3 & NO2 N		. 90	1.2		.52			.66 .62 .78 1.5
07661F NITROGEN DISSOLVED N	1.3 51F 1.4 51F 1.1 51F 1.2 51F 1.1 51F	1.2 51F 1.3 51F 1.2 51F 1.1	1.3 1.2 51F 1.1 51F 1.1 51F	1.1 51F 1.1 51F 1.2 51F 1.1 51R	1.2 51F 1.2 51F 1.0	1.4 51F 1.5 51F 1.7 51F 1.9 51F 1.7 51F	1.5 51F 1.5 51F 1.5 51F 1.6 51F 1.7 51F	1.8
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.15 .16 .16 .15	.16 .16 .17 .11	.27 .16 .18 .17	.18 .18 .20	.18 .1.7 1.13 .16	15 16 18 18 18	.17 .18 .18	.19 .14 .20 .18
15356F PHOSPHORUS DISSOLVED INORG, PO4 P		11.	.17		.13 .16 .16			.19 .16 .20 .18
15103F PHOSPHORUS DISSOLVED P MG/L	.16 .18 .17 .16	.17 .18 .18 .14	.27 .18 .19	. 19 . 20 . 20 . 20 . 20	18 18 10 10 10	.19	.19 .19 .20 .21	. 23
15301L PHOSPHORUS TOTAL INORGANIC P		.15	. 18		.15			.19
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.177	.18 .19 .15		0222222	.20 .15 .15	.23 .20 .21 .24	£ 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	. 22 . 19 . 26 . 25
SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	20 10 80 1800 20 10 80 2200 21 10 80 0200 21 10 80 0600 21 10 80 0615	21 10 80 0700 21 10 80 0800 21 10 80 1000 03 11 80 1216 18 11 80 1120	08 12 80 0900 05 01 81 1100 20 01 81 0602 20 01 81 0615 20 01 81 0700	20 01 81 0800 20 01 81 1000 20 01 81 1400 20 01 81 1800 20 01 81 2203	21 01 81 0158 21 01 81 0600 26 01 81 1100 16 02 81 1000 09 03 81 1130	18 03 81 1000 18 03 81 1400 18 03 81 1800 18 03 81 2200 19 03 81 0200	19 03 81 0600 19 03 81 0615 19 03 81 0700 19 03 81 0800 19 03 81 0940	20 03 81 1125 06 04 81 1145 21 04 81 1015 04 05 81 1030

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

STATION 00AT05BH2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N BOW RIVER BELOW CARSELAND WEIR

07506L NITROGEN TOTAL AMMONIA N MG/L	iskii	11.1.1.2.2.2	m.o.o.		
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	.30 .30 .37		1.00	H 5. 4. 6. 4. 6. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	06104F CARBON DISSOLVED
07661F NITROGEN DISSOLVED N	66. 66. 67. 68. 68. 68. 68. 68. 68.	. 55 1.9 1.9 1.5	11001 11001	1.7	06902F CARBON ORGANIC
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.034 .038 .033 .022	.022 .047 .10 .21	. 25 25 22 25 22 25 44	260.	07902F NITROGEN PARTICUL.
15356F PHOSPHORUS DISSOLVED INORG, PO¢ P MG/L	.044 .046 .039 .032	.059 .059 .11 .21	. 065 . 25 . 23 . 23	. 224	10501L RESIDUE FIXED
15103F PHOSPHORUS DISSOLVED P MG/L	. 054 . 040 . 040 . 040	.030 .063 .12 .23	.072 .26 .23 .23	.22	10401L RESIDUE NONFILTR.
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.16 .15 .076 .058	.046 .070 .11 .21	. 083 2.26 2.24 2.24 2.64	.24	02073L TURBIDITY
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.19 .20 .085 .059	.053 .079 .13 .24		. 32	02061S TEMPERATURE OF
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426	
SAMPLE DATE MST D M Y HR	19 05 81 1145 19 05 81 1150 09 06 81 1225 30 06 81 1000 20 07 81 1130	08 08 81 1515 24 08 81 1245 21 09 81 0800 14 10 81 1630 02 11 81 1030	23 11 81 1030 16 12 81 1130 08 01 82 1500 01 02 82 0930 24 02 82 1000	15 03 82 1100 04 04 82 1600 28 04 82 1020	

06104F	CARBON	DISSOLVED	ORGANIC	O	HG/L												
06902F	CARBON	ORGANIC	PARTICULATE	U	MG/L												
07902F	NITROGEN	PARTICUL.		z	HG/L	.11	.12	.27	.27	90.	.08	60.	.03	.21		c	80.
10501	RESIDUE	FIXED	NONFILTR.		HG/L	2.	.11	42.	45.	.1.	1.	17.	.11	10.	2.	-	
10401	RESIDUE	NONFILTR.			MG/L	7.	7.	48.	51.	.11	4.	2.	ų.	13.	7.		4
02073L	TURBIDITY				UTU	10.2	10.2	32.	35.	2.3	2.6	4.7	5.0	4.8	4.7		
020615	TEMPERATURE	OF.	MATER		DEG.C.	11.0	11.0	10.	10.	14.5	14.5	15.5	15.5	17.5	17.5	a c	6.01
				SUBM	ID	0456	0456	0456	0456	0426	0456	0456	0426	0456	0456	7670	0740
			SAMPLE DATE	MST	D M Y HR	15 05 79 0905	15 05 79 0945	29 05 79 0615	29 05 79 0645	12 06 79 0700	62 90	62 90	4	62 20	09 07 79 0730	0	23 07 79 0050
						-				,	-				_	,	

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 00AT05BH2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N BOW RIVER BELOW CARSELAND HEIR

06104F CARBON DISSOLVED ORGANIC C MG/L			1. 061 1. 061 1. 061 1. 061 1. 061		ດໍ
06902F CARBON ORGANIC PARTICULATE C MG/L		.32 02L	.28 02L .62 02L 1.0 02L		
07902F NITROGEN PARTICUL. N MG/L	.08	.09 02L	.04 02L .10 02L .11 02L	.15 021.	
10501L RESIDUE FIXED NONFILTR. MG/L	3. 9.6 11.7 13.6 13.6 14.	%:::::::::::::::::::::::::::::::::::::	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	14. 13. 19. 19.	14.
10401L RESIDUE NONFILTR. MG/L	3. 111.7 111.7 11.7 4.3 4.3 1.0 1.0 1.0	ii. 		25. 20. 20. 20. 19.	18.
02073L TURBIDITY JTU	7.1. 1.2. 1.2. 1.2. 1.2. 1.2. 1.2. 1.2.	2			ហ្វំ
02061S TEMPERATURE OF WATER DEG.C.	18.5 17. 17. 17. 17. 12. 7. 7.	K. 0. 0. 0. 1.		7	13. 61F 13.0 61F 13.5 61F 13.0 61F 12.5 61F 12.0 61F 11.5 61F
SUBM	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426
SAMPLE DATE NST D M Y HR	23 07 79 0705 05 08 79 1025 21 08 79 0825 21 08 79 0840 24 09 79 0640 24 09 79 0645 09 10 79 0645 09 10 79 0645 29 10 79 0645	10 79 111 79 112 79 12 79 01 80	01 80 01 80 01 80 02 80 03 80 03 80	24 03 80 0855 24 03 80 0900 08 04 80 0825 21 04 80 0830 21 04 80 0825 21 04 80 0830 05 05 80 1315	05 05 80 1320 12 05 80 1300 12 05 80 1700 12 05 80 2100 13 05 80 0500 13 05 80 0500 13 05 80 0500 13 05 80 0500

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 3 UTM 08 611800E 5632150N	
R 3 UTM	4
LAT. 50D 49M 56S LONG. 133D 24M 46S PI	UPSTREAM OF HIGHWAY #24
. 500	BOW RIVER BELOW CARSELAND WEIR

06104F CARBON DISSOLVED ORGANIC C MG/L	2. 06F 2. 3. 04L	v. i v.		iù	ਜਜਜਨ	i		1
06902F CARBON ORGANIC PARTICULATE C MG/L	.90 1.0 02L	86. 848. 488.		96°. 88°.	. 53 . 50 . 53	.43		. 20
07902F NITROGEN PARTICUL. N MG/L	.18 .13 02L	.15		.17	.00.00.00.00.00.00.00.00.00.00.00.00.00	÷0.		.04
10501L RESIDUE FIXED NONFILTR. MG/L	13. 12. 35.0	51.0 6.0 4.		6. 15.	ii ii ii ii ii	÷		2;;;
10401L RESIDUE NONFILTR. MG/L	15. 13. 39.0	55.0 7.0 4.		9.	ถ่งระก่	ċ		ห์ห์ส่
02073L TURBIDITY JTU	2.5 3.5 5.5	19. 2.2 1.5		6.4 0.5	68411	3.7		7. H H G
02061S TEMPERATURE OF WATER DEG.C.	12.0 61F 13.2 61F 15. 61F 15. 61F	17. 61F 15. 61F 19.2 61F 21.0 61F	20.7 61F 20.0 61F 19.4 61F 19.1 61F 19.0 61F	19.0 61F 19.0 61F 20.7 61F 20.0 61F 16.0 61F	14. 61F 15. 61F 12. 61F 12. 61F 16. 61F	7.0 61F 8. 61F 8.0 61F 7.5 61F	7.0 61F 6.0 61F 6.0 61F 6.0 61F 6.0 61F	6.0 61F 0. 61F .0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	13 05 80 0900 13 05 80 1300 21 05 80 0855 21 05 80 0900 03 06 80 0830	16 06 80 1400 01 07 80 1230 14 07 80 0830 21 07 80 1200 21 07 80 1600	21 07 80 2000 22 07 80 0000 22 07 80 0400 22 07 80 0415 22 07 80 0500	22 07 80 0600 22 07 80 0800 22 07 80 1200 28 07 80 1245 11 08 80 1145	25 08 80 1230 08 09 80 1300 22 09 80 1215 22 09 80 1220 06 10 80 1200	20 10 80 1000 20 10 80 1245 20 10 80 1400 20 10 80 1800 20 10 80 2200	21 10 80 0200 21 10 80 0600 21 10 80 0615 21 10 80 0700 21 10 80 0800	21 10 80 1000 03 11 80 1216 18 11 80 1120 08 12 80 0900

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 08 611800E 5632150N STATION GOATGEBA2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 BOW RIVER BELOW CARSELAND WEIR UPSTREAM OF HIGHWAY #24

06104F CARBON DISSOLVED ORGANIC C	Ň	ાં તં ≓		ຸດໍ	ณ่ณ์ห่อ๋๋๋	ท _{ี่} ที่ ถ่งถ่	તં તં તં તં
06902F CARBON ORGANIC PARTICULATE C	۵ _۴ .	.51		12.		. 80 . 50 . 40 . 42	. 46 . 39 . 52 . 43
07902F NITROGEN PARTICUL. N MG/L	90.	.87 .05		ı.	.18 .18 .39	.10 .12 .07	.09 .08 .08 .01
10501L RESIDUE FIXED NONFILTR.	:	8. 2. 16.		m	6. 3. 167. 166.	21. 7. 7.	44114
10401L RESIDUE NONFILTR. MG/L	ń	. 61		'n	7. 5. 10. 184. 183.	27. 8. 28. 7.	
02073L TURBIDITY JTU	2.1	2 H 4 7 8 E		۷ ئ	7.5.0 7.4.7 7.8.0	18. 18. 4.3 2.0	22.44
02061S TEMPERATURE OF WATER DEG.C.	0. 617 0. 617 0. 617 0. 617 0. 617 0. 617 0. 617 0. 617	0	2.0 61F 3.0 61F 3.0 61F 2.0 61F	2.0 61F 1.0 61F 1.0 61F	5.0 61F 8.0 61F 9.0 61F 11.0 61F	12.0 61F 13.0 61F 14. 61F 17. 61F	12. 61F 8. 61F 9. 61F
SUBM	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	05 01 81 1100 20 01 81 0602 20 01 81 0615 20 01 81 0700 20 01 81 1000 20 01 81 1400 20 01 81 1400 20 01 81 1400	01 81 01 81 02 81 03 81	18 03 81 1400 18 03 81 1800 18 03 81 2200 19 03 81 0200 19 03 81 0600	19 03 81 0615 19 03 81 0700 19 03 81 0800 20 03 81 1125	06 04 81 1145 21 04 81 1015 04 05 81 1030 19 05 81 1145 19 05 81 1150	09 06 81 1225 30 06 81 1000 20 07 81 1130 08 08 81 1515 24 08 81 1245	21 09 81 0800 14 10 81 1630 02 11 81 1030 23 11 81 1030

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 00ATOEBH2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N BOW RIVER BELOW CARSELAND WEIR

06104F CARBON DISSOLVED ORGANIC C	ณ่ ณ่ ณ่ ณ่ คำ	ต่ ณ่	14105L SILICA REACTIVE SIO2 MG/L					
06902F CARBON ORGANIC PARTICULATE C MG/L	.26 .18 .18 .1.4	285.	17206L CHLORIDE DISSOLVED CL MG/L					
07902F NITROGEN PARTICUL. N	L.05 .07 .09	.10	02041L SPECIFIC CONDUCT. US/CM	363. 364. 319. 317.	303. 294. 311. 284. 292.	282. 280. 289. 278. 311.	313. 277. 343. 364.	405.
10501L RESIDUE FIXED NONFILTR.	6.21.6.9	ં ન	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	0.00	00000	.0 .13. 14.	••••	0.
10401L RESIDUE NONFILTR. MG/L	o	့ က်	10106L ALKALINITY TOTAL CACO3	128. 132. 113. 113.	108. 110. 110. 101.	96. 97. 97. 100.	105. 87. 116. 129.	129.
02073L TURBIDITY JTU	40440	3.8	06152F CARBON DISSOLVED INORGANIC C					
02061S TEMPERATURE OF WATER DEG.C.	.0 61F .0 61F .0 61F .0 61F 7.0 61F	.0 61F	10301L PH PH UNITS	8.77.8	8 7 7 8 8 0 6 8 8 8 8	0 0 0 0 0 0 0 0	\$ \cdot \cdo	8.0
SUBM	0426 0426 0426 0426 0426	0426	SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	16 12 81 1130 08 01 82 1500 01 02 82 0930 24 02 82 1000 15 03 82 1100	04 04 82 1600 28 04 82 1020	SAMPLE DATE MST D M Y HR	15 05 79 0905 15 05 79 0945 29 05 79 0615 29 05 79 0645 12 06 79 0700	12 06 79 0725 26 06 79 0615 26 06 79 0635 09 07 79 0715 09 07 79 0730	23 07 79 0650 23 07 79 0705 05 08 79 1025 05 08 79 1040 21 08 79 0825	21 08 79 0830 24 09 79 0640 24 09 79 0645 09 10 79 0645 09 10 79 0645	29 10 79 0755

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05BH2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N 50W RIVER BELOW CARSELAND WEIR

14105L SILICA REACTIVE SIO2 MG/L		4444 00004	444ww www.ro	4 w w w o	2.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	w graw woooo	2.2.5.1 2.5.5.0	2.0
17206L CHLORIDE DISSOLVED CL MG/L				พ.พ.พ.พ จ์พัฒ์จ.จ๋	0 H H O O O	ชหพพพ ชหพพพ	4 w w 4	ę. 6.
02041L SPECIFIC COMDUCT. US/CM	403. 413. 415. 438.	491. 491. 464. 462. 455.	429. 442. 431. 430.	377. 382. 355. 360.	323. 316. 315. 316.	324. 339. 326. 333.	342. 364. 365. 369.	371. 374. 370. 366.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000	•••••					0.1.0.0	0.
10106L ALKALINITY TOTAL CACO3 MG/L	130. 132. 130. 112.	158. 159. 147. 144.	111. 133. 128. 120.	130. 01L 130. 01L 120. 01L 130. 01L	120. 01L 111. 01L 112. 01L 116. 01L	119. 01L 120. 01L 113. 01L 119. 01L	118. 01L 126. 01L 127. 01L 127. 01L	125. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L		39. 53L 39. 52L 35. 53L 35. 52L 28. 53L	29. 52L 26. 53L 26. 52L 23. 53L 23. 52L	21. 53L 22. 52L 26. 53L 28. 52L 24. 53F	24. 23. 53F 24. 23. 52L	2, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,	က် လုံ လုံ လုံ လုံ လုံ လုံ လုံ	. 59.
10301L PH PH UNITS	00000	0.7.7.7.7 0.0.0.0	 	7.77 7.77 8.76 1.8	8.27 7.77 7.9 8.0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	29 10 79 0800 19 11 79 0725 19 11 79 0730 10 12 79 0755 10 12 79 0800	7 01 80 1125 7 01 80 1130 8 01 80 0825 9 01 80 0830 8 02 80 0825	8 02 80 0830 0 03 80 0955 0 03 80 1000 4 03 80 0855 4 03 80 0900	04 80 0825 04 80 0830 04 80 0825 04 80 0830 05 80 1315	5 05 80 1320 1 05 80 0355 1 05 80 0900 3 06 80 0830	1 07 80 1230 4 07 80 0830 8 07 80 1245 1 08 80 1145 5 08 80 1230	3 09 80 1300 2 09 80 1215 2 09 80 1220 3 10 80 1200 10 80 1000	0 10 80 1245 0 10 80 1400 0 10 80 1800 0 10 80 2200
	NHHH	07 07 28 28 18	18 10 10 24 24	08 08 21 21 21 05	05 21 21 03 03	01 14 28 11 25	08 22 22 06 20	20 20 20 20

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 UTM 08 611800E 5632150N	
PR 3	#24
24M 46S	HIGHWAY
ONG. 133D	PSTREAM OF
49M 56S L	2
LAT. 50D	ID WEIR
STATION 00AT05BM2215	BOW RIVER BELOW CARSELAND WEIF

14105L SILICA REACTIVE SIO2 MG/L		7.6.9.7			r m o		w 6.	5.5.5
17206L CHLORIDE DISSOLVED CL MG/L		4 7 7 7 4 4 7 8 8			4.9 7.9 8.5		4 6	5.55.53
02041L SPECIFIC CONDUCT. US/CM	369. 369. 370. 372.	377. 386. 401. 481. 413.	394. 391. 392. 399.	407. 408. 409. 402. 394.	384. 403. 389. 401.	403. 400. 390. 390.	394. 395. 401. 392.	413. 400. 370.
10151L ALKALINITY PHENOL PHTHALEIN CACO3		0000			0.00		°. °.	0.0.0.0
10106L ALKALINITY TOTAL CACO3		130. 01L 137. 01L 162. 01L 140. 01L			128. 01L 129. 01L 124. 01L		135. 01L 129. 01L	131. 01L 136. 01L 134. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L		34. 32. 36.			អ្នក ម្តាក់ ម្		41. 32.	31. 32.
10301L PH PH UNITS	00000 00000	88.1 7.7.7 8.5.7 8.5.7	8.0 8.0 8.7 7.7 8.7	7.7 0.0 0.7 7.9 6.7	8 7 8 8 8 0 6 6 8 8 8	8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	7.9
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	21 10 80 0200 21 10 80 0600 21 10 80 0615 21 10 80 0700 21 10 80 0800	21 10 80 1000 03 11 80 1216 18 11 80 1120 08 12 80 0900 05 01 81 1100	20 01 81 0602 20 01 81 0615 20 01 81 0700 20 01 81 0800 20 01 81 1000	20 01 81 1400 20 01 81 1800 20 01 81 2203 21 01 81 0158 21 01 81 0600	26 01 81 1100 16 02 81 1000 09 03 81 1130 18 03 81 1000 18 03 81 1400	18 03 81 1800 18 03 81 2200 19 03 81 0200 19 03 81 0600 19 03 81 0615	19 03 81 0700 19 03 81 0800 19 03 81 0940 20 03 81 1125 06 04 81 1145	21 04 81 1015 04 05 81 1030 19 05 81 1145 19 05 81 1150

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

	14105L SILICA REACTIVE	SIO2 MG/L	4 13 4	4. W	2.1 . 2.8 8.4.0.R	4444w 64400
150N	17206L CHLORIDE DISSOLVED	CL MG/L	01 01 E	. H. H.	8 8	7.6 6.4 8.2 12.
UTM 08 611800E 5632150N	02041L SPECIFIC CONDUCT.	US/CM	307. 334.	320.	349. 374. 388. 386.	446. 400. 395. 395. 406.
PR 3 UTM 0	10151L ALKALINITY PHENOL PHTHALETN	CACO3 MG/L	000		0.1	0.0.0.0
LONG. 133D 24M 46S UPSTREAM OF HIGHWAY	10106L ALKALINITY TOTAL	MG/L	121. 01L 129. 01L		124. 011 135. 011 136. 011 141. 011 155. 011	164. 01L 150. 01L 140. 01L 146. 01L
	06152F CARBON DISSOLVED	J/9W	30.	230. 290.	29. 32. 38.	37. 33. 38. 31.
ATOSBH2215 LAT. 50D 49M 56S BELOW CARSELAND WEIR	10301L PH	PH UNITS	8 m a	9 to 0	8 8 8 5 7 7 7 7 3 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	7.6 7.7 7.7 7.7
3M2215		SUBM	0426	0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
STATION 00AT05BM2215 BOW RIVER BELOW CARSE	A C C	D M Y HR	09 06 81 1225 30 06 81 1000	08 81 1	21 09 81 0800 14 10 81 1630 02 11 81 1030 23 11 81 1030 16 12 81 1130	08 01 82 1500 01 02 82 0930 24 02 82 1000 15 03 82 1100 04 04 82 1600

2.2

9.9

341.

0.

130. 01L

24.

8.0

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTH 12 392500E 5622650N PR 3 STATION 00AT05BM2240 LAT. 50D 44M 52S LONG. 112D 31M 27S BOW RIVER BELOW BASSANO DAM

~								
07506L NITROGEN TOTAL AMMONIA N	4444		111112	66.6111	::::::		0.00.00.00	0. 0.1.
F EN VED NO2	19F	191	19F	198	19F	19F 19L 10L	19L 10L 19L 19L	10L 19L 19L 19L
07110F NITROGEN DISSOLVED NO3 & NO2 N	.43 .31 .32	.50 .24 .23 .18	22. 24. 24. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25	.35 .29 .11 .444 .411 .411	.07 .08 .73 .63	*****	1.1.1.1.0.1.0.1.0.1.0.1.0.1.0.0.1.0.0.1.0	1.2
EN VED	51F 51F	51F 51F 51F	51F 51F	51F 51F	51F 51F	51F 51F 61L 51L	61L 51L 61L 51L 61L	51L 61L 51L 61L
07661F NITROGEN DISSOLVED N MG/L	. 73 . 72 . 47 . 47	. 75 . 35 . 35 . 35 . 35 . 35	. 50 . 65 . 65 . 65 . 65	. 44 . 61 . 52	.36 .38 .88 .90	4. L.	2.0.0.0	4 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
F RUS VED PO4	66F 66F 66F	66F 66F	034 66F 065 66F 061 12 66F	66F	66F 66F 66F	66F 66L 56L	66L 56L 56L 56L 56L	56L 66L 56L 66L
15256F PHOSPHCRUS DISSOLVED ORTHO PO4 P	.040	.064 .031 .031 .045	.034	.12 .065 .068 .044	.062	112	.24 .20 .20 .19	.19
F RUS VED PO4	46F	46F	46F 46F	46F	46F 46F 46F	46F 46L 56L	46L 56L 56L 56L 56L	56L 56L 46L
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.068 .064 .035	.063 .033 .035 .047	.040 .035 .07 .067	.13 .063 .071 .054	.065 .065 .11 .10	13 13 15 15 15	.24 .21 .21 .21	.20
RUS	13F	136	13F 13F	13F	13F 13F	13F 13L 03L	13L 03L 13L 03L	03L 13L 03L 13L
15103F PHOSPHORUS DISSOLVED P MG/L	.070	.081 .046 .046 .050	.049 .050 .074 .067	.15 .083 .08 .085	.083 .092 .12 .11	.15 .15 .17 .17	.25 .25 .22 .21	.19
IL ORUS AL ANIC	an n	6.00.00.00	N = 1		€I erl			
15301L PHOSPHGRUS TOTAL INORGANIC P MG/L	.086 .086 .14 .14	.099 .049 .048 .071	.057 .061 .047	.13 .071 .070 .075	.081 .081 .11 .12	.15 .15 .16	. 25 . 23 . 22 . 22	. 22 . 12. . 12.
L ROUS ATE								
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.098 .10 .16 .16	.124 .063 .065 .075	.072	.16 .039 .094 .11	112	.15 .17 .17 .18	22. 25. 25. 25.	.22
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
DATE	1230 1300 0910 0945 0815	0845 0940 1015 0930 0950	0800 0820 0730 0750	0845 1030 1045 0755 0810	1025 1040 1015 1020 1015	1020 1055 1100 1025 1030	11155 1200 0925 0930 0825	0830 0835 0840 0825
SAMPLE DATE MST M Y HR	05 79 05 79 05 79 05 79	06 79 06 79 06 79 06 79 06 79	07 79 07 79 07 79 07 79	07 79 07 79 07 79 08 79 08 79	08 79 08 79 09 79 10 79	10 79 10 79 10 79 11 79	12 79 12 79 01 80 01 80	01 80 02 80 02 80 03 80
SA	15 0 29 0 29 0 04 0	00 00 00 00 00 00 00 00 00 00 00 00 00	004 0 10 0 10 0 24 0	244 300 300 000 000 000 000	21 0 21 0 24 0 24 0 09 1	29 1 29 1 1 29 1 1 29 1 1 29 1 1 29 1 1 29 1 1 29 1 1 29 1 1 29 1 2	10 1 10 1 08 0 08 0	29 0 19 0 11 0

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3

UTM 12 392500E 5622650N STATION 00AT05BM2240 LAT. 50D 44M 52S LONG. 112D 31M 27S BOW RIVER BELCW BASSANO DAM

07506L NITROGEN TOTAL AMMONIA N	7.0.1.88.	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				ស ស់ឯ ខ ក់ខេល់	ને મે ને મે છે	::::::
07110F NITROGEN DISSOLVED NO3 & NO2 N	1.2 10L .94 19L .96 10L .58 19L	.54 19F .60 .41 19F .40	.07 .37 10L .33 .46 .43 10L	.47 .45 .54 .68	22 44 44 88 88	.88 1.1 .70 .63	1.0 .78 .72 .80	1.6 .39 .26 .18
07661F NITROGEN DISSOLVED N MG/L	1.8 51L 2.1 51L 1.3 61L 1.6 51L	1.0 .91 51F .56 51F .25	.26 51F .62 61L .41 .57	.66 .58 .65 .76			44444	1.9 .64 .44 .27
15256F PHOSPHOUS DISSOLVED ORTHO PO4 P MG/L	.20 56L .21 66L .20 56L .11 66L .10 56L	.10 66F .088 .089 66F .071	.052 .037 56L .017 L.003	.029 .078 .095 .065 56L	.052 .085 .084	11: 73: 81: 81:	si si si 4	.17 .031 .021
15356F PHOSPHORUS DISSOLVED INORG. PO4 P MG/L	.20 56L .22 46L .23 56L .13 46L .11 56L	.11 46F .088 .089 46F	.064 .038 56L .017 .003	.034 .095 .11 .056	. 060 . 088 . 067 . 084	.12 .15 .15	15 12 14	.19 .034 .028
15103F PHOSPHORUS DISSOLVED P MG/L	.21 03L .24 13L .23 03L .14 13L .13 03L	.13 13F .12 .094 13F .088 .076 13F	.073 .044 03L .029 .011	.042 .11 .057 .074 03L	.072 .097 .097 .10	12 27 15 16		.23 .044 .034
15301L PHOSPHORUS TOTAL INDRGANIC P MG/L	. 23 . 30 . 18 . 24	.23	.084 .086 .011	.049 .12 .15 .067	.076 01. 71.	.17 .29 .18 .16	.19	.26 .095 .11 .025
15406L PHOSPHOROUS TOTAL PHOSFHATE P	40 m m r	.26 .12 .13	.11 .098 .13 .059	.113 .133 .094	.088 .11 .13 .18		.19 .177 .19	.28 .11 .12 .034
SUBH	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	11 03 80 0830 25 03 80 1410 25 03 80 1415 09 04 80 0825 09 04 80 0830	22 04 80 0855 22 04 80 0900 05 05 80 1705 05 05 80 1710 21 05 80 1225	21 05 80 1230 03 06 80 1130 17 06 80 0910 02 07 80 0900 14 07 80 1400	15 07 80 0900 29 07 80 1100 12 08 80 0915 26 08 80 1115 07 09 80 1305	09 09 60 1000 23 09 60 1000 07 10 60 1000 21 10 80 1100 04 11 80 1048	18 11 80 1310 09 12 80 0900 06 01 81 0900 27 01 81 1000 17 02 81 0900	10 03 81 0800 10 03 81 0830 21 03 81 1213 07 04 81 1100 22 04 81 0800	05 05 81 0800 20 05 81 0900 07 06 81 1300 01 07 81 0820

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3 UTM 12 392500E 5622650N STATION 00ATO5BM2240 LAT. 50D 44M 52S LONG. 112D 31M 27S BOW RIVER BELOW BASSANO DAM

07506L NITROGEN TOTAL AMMONIA N MG/L		11.7.46	1.0	9.4.
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	.13 .32 .30 .56	1.2 1.2 1.2 1.2	u i i i i i i o ii i i i	1.5
D7661F NITROGEN DISSOLVED N MG/L		1.4 1.3 1.9	2 2 2 2 2 1 2 2 2 2 2 1 3 2 1 2 2 2 1	1.9
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.003 .017 .020 .039	.043 .11 .037 .13	. 27 . 28 . 20 . 21	.23
15356F PHOSPHORUS DISSOLVED INORG. PO4 P MG/L	. 004 . 023 . 023 . 043	.043 .12 .042 .13	. 27 . 29 . 20 . 21 . 24	.23
15103F PHOSPHORUS DISSOLVED P MG/L	. 005	.057 .12 .046 .14	. 29 . 29 . 23 . 23	.23
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.016 .054 .052 .061	.049 .13 .46 .15	.30	.34
15406L PHOSPHOROUS TOTAL PHOSPHATE P P				
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	06 07 81 1255 21 07 81 0930 08 08 81 1320 25 08 81 0900 31 08 81 1230	22 09 81 0930 14 10 81 0930 03 11 81 0950 24 11 81 1000 16 12 81 1040	08 01 82 1730 08 01 82 1735 02 02 82 1000 22 02 82 0930 16 03 82 1000	04 04 82 1415 26 04 82 0720

06104F CARBON DISSOLVED	ORGANIC	ပ	MG/L											
06902F CARBON ORGANIC	PARTICULATE	ပ	MG/L											
07902F NITROGEN PARTICUL.		z	MG/L	.10	.10	45.	\$5°	90°	.03	50.	.17	.08	90.	.14
10501L RESIDUE FIXED	NONFILTR.		MG/L	11.	11.	70.	73.	.2	φ.	.1.	1.	11.	11.	
10401L RESIDUE NONFILTR.			MG/L	'n	м.	78.	82.	. 4	12.	2.	2.	3.	3.	'n
02073L TURBIDITY			טדנ	4.6	8.5	51.	53.	6.8	9.9	3.7	4.3	7.5	6.0	
02061S TEMPERATURE OF	WATER		DEG.C.	15.	15.	13.	13.	16.5	16.5	17.5	17.5	18.5	18.5	17.5
·		SUBM	ID	0456	0426	0456	0456	0456	0426	0426	0426	0456	0456	0426
	SAMPLE DATE	MST	D M Y HR	15 05 79 1230	15 05 79 1300	29 05 79 0910	29 05 79 0945	04 06 79 0815	62 90	62 90		90	26 06 79 0950	04 07 79 0800

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 00AT05BH2240 LAT. 50D 44M 52S LONG. 112D 31M 27S PR 3 UTM 12 392500E 5622650N BOW RIVER BELOW BASSANO DAH

06104F CARBON DISSOLVED ORGANIC C MG/L		3.06L 5.04L 1.06L 1.04L	1. 06L 1. 06L 1. 06L 1. 04L 4. 06L	3. 04L 7. 06L 7. 04L 3. 06F	2. 06F 2. 06F 2. 06F
06902F CARBON ORGANIC PARTICULATE C MG/L		.27 02L .35 02L	.61 02L .78 02L 1.4 02L	3.6 02L	.63
07902F NITROGEN PARTICUL. N MG/L .23	.04 .16 .08 .09 .08 .08	.05 02L	.07 02L .10 02L .22 02L	.03 02L	.12
10501L RESIDUE FIXED NONFILTR. MG/L 1. 1. 1. L1. L1.	1.2 10.3 6.7 LLI. LI. 2.8 3. 6. 17. 7.		9. 10. 11. 26.	16. 35. 40. 69.	เก๋ หา๋ ณ๋ ง๋๋
10401L RESIDUE NONFILTR. MG/L 3. 3. 3. 11. L1.	20.2 13.1 13.1 11.1 11.1 10.2 10.2 10.2	મું મું લું લું	10. 11. 12. 13.	20. 39. 46. 80.	. 62.4
02073L TURBIDITY JTU 2.8	. บุน	64193 64193 7	9 w w w . 5 4 w w w	17. 38. 41.	4.4 4.4 2.0
02061S TEMPERATURE OF WATER DEG.C. 17.5 20. 20.5 19.5 19.5	20.5 17.5 17.5 10.5 10.0 10.0 10.0 10.0	01100		1. 1. 61F 7. 61F 7. 61F	15. 61F 15. 61F 19. 61F
SUBH ID 0426 0426 0426 0426 0426	9224 9224	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST MST 04 07 79 0820 10 07 79 0730 10 07 79 0750 24 07 79 0845	30 07 79 1035 30 07 79 1045 06 08 79 0755 06 08 79 0810 21 08 79 1025 24 09 79 1015 24 09 79 1015 29 10 79 105 29 10 79 105 29 10 79 105 19 11 79 1055 10 12 79 1155	10 12 79 1200 08 01 80 0925 08 01 80 0930 29 01 80 0825 29 01 80 0830	19 02 80 0835 19 02 80 0840 11 03 80 0825 11 03 80 0830 25 03 80 1410	25 03 80 1415 09 04 80 0825 09 04 80 0830 22 04 80 0855 22 04 80 0900	05 05 80 1705 05 05 80 1710 21 05 80 1225 21 05 80 1230

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 3 UTM 12 392500E 5622650N STATION 00AT055M2240 LAT. 50D 44M 52S LONG. 112D 31M 27S BOW RIVER BELOW BASSANO DAM

06104F CARBON DISSOLVED ORGANIC C MG/L	3. 04L 2. 2. 2. 04L 2.	1. 2. 2. 04L 2. 04L	11:5 5			• • • • • • • • • • • • • • • • • • •		નંતાં મ
06902F CARBON ORGANIC PARTICULATE C MG/L	.48 02L 1.8 .35 .67 02L .52	.56 .42 .33 .45 02L	6. 1. 1. 1. 2. 2. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	. 38 . 777 . 44 . 69	1.80 1.4 1.88 1.44	1.4 1.9 1.34 2.27	. 34.2.5 6.00 7.00 7.00	8.9 .71
07902F NITROGEN PARTICUL. N MG/L	.09 02L .18 .07 .14 02L	.13 .17 .08 .10 02L	01. 00. 00. 00. 00. 00. 00.		.09 .17 .21 .20	.22 .18 .07 .06	.06 .08 .05 .11	. 09 . 09
10501L RESIDUE FIXED NONFILTR.	4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Li	w % & % % %	3. 32. 11.	11. 26. 23. 28.	4,0 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,	¢ v, w, v, ¢	313. 9. L1.
10401L RESIDUE NONFILTR. MG/L	37.0 62. 7.0 6.	7.9.4	66 4. 566. 580.	3. 37. 14.	13. 55. 33.	51. 70. 4. 6.	111. 8.8. 7.	337. 11. 2.0 3.
02073L TURBIDITY JTU	17.0 26. 3.1 3.2	พพพ พ ช่อน ซ่	3.7 24. 24. 7.3	00004 00400	4.3 16.0 16.0 8.0 17.0	36. 40. 25. 4.3	on oo oo rid	89 80 80 80 80 80 80 80 80 80 80 80 80 80
02061S TEMPERATURE OF WATER DEG.C.	12. 61F 18. 61F 15. 61F	22.0 61F 17.0 61F 16. 61F 16.7 61F 17. 61F	12. 61F 15. 61F 8.5 61F 0. 61F	.0 61F	5.0 61F 9.0 61F 9.0 61F	13.0 61F 13.0 61F 15.0 61F 19.5 61F	20. 61F 18. 61F 16.8 61F 13. 61F 6. 61F	6. 61F .0 61F .0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	03 06 80 1130 17 06 80 0910 02 07 80 0900 14 07 80 1400 15 07 80 0900	29 07 80 1100 12 08 80 0915 26 08 80 1115 07 09 80 1305 09 09 80 1000	23 09 80 1000 07 10 80 1000 21 10 80 1100 04 11 80 1048 18 11 80 1310	09 12 80 0900 06 01 81 0900 27 01 81 1000 17 02 81 0900 10 03 81 0800	10 03 81 0830 21 03 81 1213 07 04 81 1100 22 04 81 0800 05 05 81 0800	20 05 81 0900 07 06 81 1300 01 07 81 0820 06 07 81 1255 21 07 81 0930	08 08 81 1320 25 08 81 0900 31 08 81 1230 22 09 81 0930 14 10 81 0930	03 II B1 0950 24 II B1 1000 16 IZ B1 1040 08 01 82 1730

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 392500E 5622650N PR 3 STATION OBATOSBH2240 LAT. 500 44H 52S LONG. 112D 31H 27S BOW RIVER BELOW BASSANO DAM

06104F CARBON DISSOLVED ORGANIC C MG/L	ณ่ ณ่ ณ่ ท่ ว่	'n	14105L SILICA REACTIVE SIO2 MG/L					
06902F CARBON ORGANIC PARTICULATE C MG/L	. 36	7.7	17206L CHLORIDE DISSOLVED CL MG/L					
07902F NITROSEN PARTICUL. N MG/L	. 05	. 62	02041L SPECIFIC CONDUCT. US/CM	391. 411. 314. 311.	355. 299. 299. 299.	280. 278. 296. 296. 282.	282. 259. 275. 265.	289.
10501L RESIDUE FIXED NONFILTR.	พ่งจำตัด	134.	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	•••	.0 15.0 13.	41. 34. .0	19. 63. 30. 42.	
10401L RESIDUE NONFILTR. MG/L	4 × 10 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 ×	148.	10106L ALKALINITY TOTAL CACO3 MG/L	135. 135. 110. 111.	118. 103. 104. 107.	96. 97. 102. 103. 90.	88. 93. 93.	98.
02073L TURBIDITY	8 5 5 7 5 8 5 8 5 8 5 9 5 9 5 9 5 9 5 9 5 9 5 9	36.	06152F CAREON DISSOLVED INORGANIC C					
02061S TEMPERATURE OF WATER DEG.C.	5.0 611 16 0.0 17 0 0.1 17 0 0.1	.0 61F	10301L PH PH UNITS	7.9 7.9 8.0	00000	စာ စာ စာ စာ စာ စာ ကုံ ကုံ စ	6.0.00 6.0.00	9.5
SUBM	0426 0426 0426 0426 0426	0426	SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426
SAMPLE DATE HST D M Y HR	03 01 82 1735 02 02 82 1000 22 02 82 0930 16 03 82 1000 04 04 82 1415	26 04 82 0720	SAMPLE DATE MST D M Y HR	15 05 79 1230 15 05 79 1300 29 05 79 0910 29 05 79 0945 04 06 79 0815	04 06 79 0845 12 06 79 0940 12 06 79 1015 26 06 79 0930 26 06 79 0950	04 07 79 0800 04 07 79 0820 10 07 79 0730 10 07 79 0750 24 07 79 0830	24 07 79 0845 30 07 79 1030 30 07 79 1045 06 08 79 0755 06 08 79 0810	21 08 79 1025 21 08 79 1040

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05BM2240 LAT. 50D 44M 52S LONG. 112D 31M 27S PR 3 UTM 12 392500E 5622650N BOW RIVER BELOW BASSANO DAM

14105L SILICA REACTIVE SIO2 MG/L	\$ 6 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5	444 W W	4 4 4 4 6 0 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . 3 .	L 8.4 6.5.5 5.5.5	W . MH	1.0 8.8 1.1
17206L CHLORIDE DISSOLVED CL MG/L			4444 V V W 44	1.2.2.2.4	VW4W4 4 & H 4 V	4444 4444
02041L SPECIFIC CONDUCT. US/CM 341. 345. 366.	406. 414. 417. 473. 473. 470. 503. 504. 502.	469. 447. 445. 419.	376. 377. 387. 386.	330. 323. 322. 331. 311.	335. 324. 330. 313.	337. 328. 332.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L 5.1 4.8		0,0,0,0,0	0.0	0. 1.0 .0	.0 11.2 7.0 9.8	8.4 12.6 10.0 2.9
10106L ALKALINITY TOTAL CACO3 MG/L 86. 86. 86. 129.	130. 134. 134. 122. 120. 160. 148. 113.	113. 140. 138. 110.	110. 01L 110. 01L 130. 01L 140. 01L	120. 01L 119. 01L 119. 01L 119. 01L	121. 01L 118. 01L 118. 01L 116. 01L	119. 01L 118. 01L 116. 01L 130. 01L
06152F CARBON DISSOLVED INDRGANIC C MG/L	39. 53L 40. 52L 36. 53L 36. 52L 29. 53L	29. 52L 26. 53L 27. 52L 22. 53L 22. 53L	19. 53L 19. 52L 28. 53F 28.	24. 53F 24. 53F 23. 52L 23.	24. 22. 52L 24. 24.	24. 22. 52L 21. 30.
10301L PH PH UNITS 8.8 8.9 8.6 8.6	2 800000 77777 2 800000 77777	7.8 7.6 7.6 7.7	7.7.7 7.8.0 8.7.0 8.5.0	00000 00000	8 6 6 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	8.9 9.1 9.1
SUBM ID 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR 24 09 79 1015 24 09 79 1020 09 10 79 1020	11111111111111111111111111111111111111	19 02 80 0840 11 03 80 0825 11 03 80 0830 25 03 80 1410 25 03 80 1415	09 04 80 0825 09 04 80 0830 22 04 80 0855 22 04 80 0900 05 05 80 1705	05 05 80 1710 21 05 80 1225 21 05 80 1230 03 06 80 1130 17 06 80 0910	02 ff 80 0900 14 07 80 1400 15 ff 8f 0900 29 07 80 1100 12 0ff 80 0915	26 08 80 1115 07 09 80 1305 09 09 80 1000 23 09 80 1000

PAGE 87

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2 STATION 00ATOEBM2240 LAT, 50D 44M 52S LONG. 112D 31M 27S PR 3 UTM 12 392500E 5622650N BOW RIVER BELOW BASSANO DAM

14105L SILICA REACTIVE SIO2 MG/L	8. 1. 2. 2. 4. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	44 W W W A H L W W W	0 0 m 0 m	4.00 K	01 0044	4 0 0 0 0 4 0 0 0 0 0 4	444w
17206L CHLORIDE DISSOLVED CL MG/L	444WV V10W0	WW 0 0 0	พ 4 4 0 0 o ซ พ ั	2.2 2.2 2.3 4.5	0 W 4 W W U L L L L L L L L L L L L L L L L L	12. 8.3 7.7 7.0	9.0 13. 9.4 6.4
02041L SPECIFIC CONDUCT. US/CM	376. 375. 390. 398. 516.	429. 390. 401. 394.	409. 403. 406. 440. 391.	305. 321. 322. 294. 320.	313. 324. 341. 382.	406. 462. 490. 496. 421.	420. 417. 412. 321.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	rv v o v o o	00000	ööööö	0 0 4 0 0	w . 8 , w 0 0 0	00000	0000
10106L ALKALINITY TOTAL CACO3	127. 01L 130. 01L 134. 01L 139. 01L 175. 01L	145. 011 134. 011 132. 011 127. 011	133. 01L 133. 01L 134. 01L 142. 01L 138. 01L	122. 011 130. 011 127. 011 117. 011	121. 01L 122. 01L 127. 01L 138. 01L	146. 011 171. 011 183. 011 155. 011	150. 011 140. 011 145. 011 115. 011
06152F CAREON DISSOLVED INORGANIC C	28 341. 34.	28. 34. 38. 38.	42. 32. 36.	28. 32. 31.	29. 20. 29. 33.	25. 42. 42. 41. 35.	33. 33. 25.
10301L PH PH UNITS	000000 01441	88.78.9	000000 000000	00000 1.7.7.3.	000000 00000	8.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7	7.7. 7.7. 7.7. 8.
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
	1000 1100 1043 1310	0900 0900 0800 0830	1213 1100 0800 0800 0900	1300 0820 1255 0930 1320	0900 1230 0930 0950	1000 1040 1730 1000	0930 1000 1415 0720
NST Y	800 1 800 1 800 1 800 1 800 1	81 81 1 81 0 81 0	881 1		81 0 81 0 81 0 81 0		82 0 82 1 82 1 82 0
SAMPLE DATE MST M Y HR	10 8 110 8 111 8 112 8	01 8 02 8 03 8	004000000000000000000000000000000000000	06 81 07 81 07 81 07 81	008 009 009 011 009 009 011	11 81 12 81 01 82 01 82 02 82	0.50 0.30 0.40 0.40 0.80 0.80 0.80
SA	07 1 21 1 04 1 18 1 09 1	06 0 27 0 17 0 10 0	21 0 07 0 22 0 05 0 20 0	07 00 00 00 00 00 00 00 00 00 00	25 0 31 0 14 1 14 1 10 1 1 1 1 1 1 1 1 1 1 1 1	24 1 16 1 08 0 02 0	22 14 04 00 26 00 00 00 00 00 00 00 00 00 00 00 00 00
	00000	00111	40404	00000	SHOUND	0000	2400

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3 UTM 12 413200E 5587150N STATION 00AT05BN2245 LAT. 50D 25M 55S LONG. 112D 13M 19S BOW RIVER AT BOW CITY BRIBGE

07506L NITROGEN TOTAL AMMONIA N	::::::	111122	က်တေတ်လေ	r. 6 6 r. 6	, , , , , , , , , , , , , , , , , , ,			1111
07110F NITROGEN DISSOLVED NO3 & NO2 N	L.01 19F .01 .30 19F .32 .80 19F	.82 1.5 19L 1.5 10L 1.6 19L	1.4 19L 1.7 10L 1.4 19L 1.4 10L	1.4 1.1 1.0 1.0 1.0 1.0 1.0 1.0	.68 19L .68 10L .60 19F .74	.17 L.01 L.01 .38 10L .35	.27 L.01 L.01 L.01	.07 L.01 L.01 10L L.01
07661F NITROGEN DISSOLVED N MG/L	.18 .21 51F .52 .53 51F	1.2 51F 1.9 61L 1.9 51L 2.7 61L 2.6 51L	2.0 61L 2.1 51L 2.1 61L 2.0 51L 2.0 61L	1.9 51L 1.7 61L 1.9 51L 1.8 61L	1.6 61L 1.6 51L 1.1 51F .27	.37 51F .22 .25 51F .55 61L	.36 .18 61L .17 .23	.20 .18 .30 61L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.007 66F .007 66F .003 66F .028 66F	.030 .14 66L .14 56L .23 66L	.10 66L .16 56L .18 66L .17 56L .18 66L	.18 56L .20 66L .19 56L .19 56L	.11 66L .10 56L .090 66F .086	.027 .015 66F .013 .035 56L	L.003 .003 56L .004 .010	.005 L.003 .006 56L L.003
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.013 46F .010 .006 46F .007	.037 .14 46L .15 56L .22 56L	.18 46L .17 56L .18 56L .19 46L	.19 56L .20 46L .20 56L .20 46L	.13 46L .11 56L .092 46F .11	.032 .021 46F .016 .038 56L	L.003 .007 56L .007	.009 .005 .007 56L
15103F PHOSPHORUS DISSOLVED P MG/L	.029 13F .020 .015 13F .014	.047 .15 13L .15 03L .25 13L	.18 13L .18 03L .18 13L .18 03L .20 13L	.20 03L .21 13L .21 03L .21 13L	.13 13L .13 03L .12 13F .11	.053 .040 13F .047 03L .026	.023 .012 03L .009 .015	.015 .013 .013 03L
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	. 025 . 023 . 028 . 026	.042	.18 .20 .19	.23 .22 .27	. 22 . 22 . 25 . 24 . 047	.12	.003 .010 .018 .027	.016 .018 .017
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 050	.053 .18 .26	.18 .21 .21	12. 23. 83. 12.	.26 .27 .27 .27 .080	.072 .073 .13	.041 .017 .027 .035	.032 .025 .024
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	24 09 79 1305 24 09 79 1310 09 10 79 1355 09 10 79 1400 29 10 79 1355	29 10 79 1400 19 11 79 1225 19 11 79 1230 10 12 79 1330 10 12 79 1330	08 01 80 1125 08 01 80 1130 29 01 80 1040 19 02 80 1035	19 02 80 1040 11 03 80 1025 11 03 80 1030 25 03 80 0910 25 03 80 0915	09 04 80 1020 09 04 80 1025 22 04 80 1125 22 04 80 1130 06 05 80 1905	06 05 80 1910 21 05 80 1555 21 05 80 1600 03 06 80 1500 17 06 80 1230	02 07 80 1230 14 07 80 1435 15 07 80 1300 29 07 80 1310 12 08 80 1340	12 08 80 1345 26 08 80 1315 07 09 80 1345 09 09 80 1230

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

STATION 00AT05BN2245 LAT. 50D 25M 55S LONG. 112D 13M 19S FR 3 UTM 12 413200E 5587150N BOW RIVER AT BOW CITY BRIBGE

07506L NITROGEN TOTAL AMHONIA N	1111	© 7. 0 H E	4.2.1.1	HHHHH LLLL		4,10,0,0	ன் ப்
07110F NITROSEN DISSOLVED NO3 & NO2 NG AG/L	1.0	1.1 .70 .10 0.1	. 78 . 72 . 52 . 54 . 73	. 257 122 		uuuuu wuudu	4.1 1.6 1.5 6.5
07661F NITROGEN DISSOLVED N	.555	2 H H	1.4 1.0 1.0 87 .93	.76 .37 .22 .11	25. 24. 24. 24. 24.	2 2 2 2 2 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2.0 1.9 .90
15256F PHOSFHORUS DISSOLVED ORTHO PO4 P MG/L	. 010 . 007 . 086 . 096	.15 .13 .15 .14	.14 .090 .11 .12	.029 .015 L.003 L.003	.016 .026 .028 L.003	.087 .13 .19 .25	.21 .21 .26 .063
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.010 .009 .10 .088 .10	. 15 . 13 . 15 . 16	.14 .096 .11 .12	.034 .021 L.003 .003	.019 .026 .032 .010	110 113 120 100 100	.23 .21 .26 .063
15103F PHOSPHORUS DISSOLVED P MG/L	.013 .019 .12 .11	.15 .14 .15 .16	115	.039 .026 .007 .005	.026 .029 .041 .021	.10 2.26 2.00 2.00	.23 .22 .27 .071
15301L PHOSPHORUS TOTAL INORGANIC P HG/L	.025 .024 .17 .15	71.13	118 118 119	.11 .094 .016 .023	.052 .042 .041 .021	.32 .14 .20 .26	.24 .23 .36
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	00.000.0000.0000.0000.0000.0000.0000.0000	1.5 1.5 1.0 1.9	.19 .18 .71. .25	.15 .11 .027 .042	.10 .042 .060 .020	.34 .16 .20 .26	.25 .30 .39
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE HST D M Y HR	23 09 80 1145 07 10 80 1215 21 10 80 1330 04 11 80 1330 19 11 80 1200	12 80 01 81 02 81 03 81	21 03 81 1420 07 04 81 1330 22 04 81 1000 22 04 81 1005 05 05 61 1045	20 05 81 1130 07 06 81 1115 01 07 81 1030 06 07 81 1345 21 07 81 1235	08 08 81 1150 25 08 81 1345 31 08 81 1315 22 09 81 1130 14 10 81 1415	03 11 81 1130 24 11 81 1130 16 12 81 0930 08 01 82 1900 02 02 82 1200	22 02 82 1100 16 03 82 1130 04 04 82 1300 26 04 82 0930

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 00AT05BN2245 LAT. 50D 25M 55S LONG. 112D 13M 19S PR 3 UTM 12 413200E 5587150N BOW RIVER AT BOW CITY BRIBGE

06104F CARBON DISSOLVED ORGANIC C MG/L	2. 06L 4. 04L 1. 06L 1. 04L 1. 06L	2. 12.06L 12.06L 13.06L 13.06L 13.06L 14.06L 15.06L	2. 06F 3. 04L 2. 04L 2. 04L 2. 04L	2. 2. 8. 04L
06902F CARBON ORGANIC PARTICULATE C MG/L	.24 02L .27 02L .59 02L	.89 02L 1.4 02L 2.0 02L 3.0	.95 .92 02L 2.4 .30 .30 .16 .80	.27 .55 02L .65
07902F NITROGEN PARTICUL. N MG/L .19 .16	.14 02L .06 02L .04 02L .05 02L	.12 02L .23 02L .27 02L .56	.24 .16 02L .27 .07 .05 02L .12	.05 .07 02L
10501L RESIDUE FIXED NONFILTR. MG/L 3. 8. 7. 5. 5.	, , , , , , , , , , , , , , , , , , ,	10. 12. 15. 16. 35. 35. 86.	1. 60.0 99. 11. 11.	8. L1.
10401L RESIDUE NONFILTR. MG/L 8. 11. 11.	9.1. 	15. 15. 15. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	3. 67.0 67.0 108. 1.0 1.1 1.1	8 9 7 8
02073L TURBIDITY JTU 3.9 3.8 4.0 4.0 4.2 5.0	1.8 2.1.8 2.00 1.1.00 1.1.00	2.0 5.5 17. 21.0 35. 40. 1.3	3.0 27.26 38.0 1.8 1.8 3.0	0. w w . v . v . v . v . v . v . v . v .
02061S TEMPERATURE OF WATER DEG.C. 14. 12. 12. 7.	4400	0. 0. 0. 0. 1. 61F 10. 61F 11. 61F	11. 61F 15. 61F 20. 61F 21.3 61F 21.0 61F 19.0 61F	20. 61F 19.6 61F 19. 61F
SUBM ID 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
M M 009 110 110 110 110 110 110 110 110 110	80 80 80 80	19 02 80 1040 11 03 80 1025 11 03 80 1035 25 03 80 0916 25 03 80 0915 09 04 80 1020 09 04 80 1125 22 04 80 1130 06 05 80 1905	06 05 80 1910 21 05 80 1555 21 05 80 1500 03 06 80 1500 17 06 80 1230 02 07 80 1230 15 07 80 1310 29 07 80 1310 12 08 80 1340	12 08 80 1345 26 08 80 1315 07 09 80 1345 09 09 80 1230

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 3 UTM 12 413200E 5587150N STATION 00AT05BM2245 LAT. 50D 25M 55S LONG. 112D 13M 19S BOW RIVER AT BOW CITY BRIBGE

06104F CARBON DISSOLVED ORGANIC C			 ณ ณ ณ ณ ๓	નું મેં મેં હેલું હું હું હું હું હું હું હું હું હું હ	ที่ผู้ที่ที่ผู้ ผู้ที่สำทั่
06902F CARBON ORGANIC PARTICULATE C MG/L	. 554 	.52 .10 .47 1.1	.70 2.0 .61 .57	2.2 2.0 2.4 2.4 2.6 4.6 2.6 4.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8	5.5 61.9 7.5 7.5 7.5 7.5 7.5 7.5 7.5
07902F NITROGEN PARTICUL. N	.12	.00.000	.12 .26 .17 .15	. 28 . 19 . 08 . 09 . 08 . 10 . 10 . 10 . 08	.64 .03 .03 .06 .06 .10 .10 .12
10501L RESIDUE FIXED NONFILTR.	3. 1. 27. 28.	5. 4. 7. 16.	21. 69. 12. 10.	122. 114. 12. 12. 8. 8. 35. 2. 2. 2.	105. 2. 11. 2. 4. 4. 17. 8.
10401L RESIDUE NONFILTR. MG/L	3 5 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . 3 . 3	6. 5. 10. 20. 17.	23. 74. 14. 12.	136. 121. 14. 39. 39. 4.	116. 2. L1. 2. 4. 4. 10. 178.
02073L TURBIDITY JTU	2.4 1.7 16. 9.2 13.	2.8 2.9 10.0 6.7	6.00 7.00 7.00 7.00	555. 19.5.8 11.7 2.8	35. 1.5 1.4 3.6 7.1 43.
02061S TEMPERATURE OF WATER DEG.C.	12.5 61F 17. 61F 7. 61F 0. 61F	0. 61F	6.0 61F 11.0 61F 11.0 61F	14.0 61F 14.0 61F 16.0 61F 21.1 61F 18. 61F 21. 61F 21. 61F 19.1 61F 11. 61F	4. 61F .0 61F .0 61F .0 61F 5.0 61F 5.0 61F 3.0 61F
SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	23 09 80 1145 07 10 80 1215 21 10 80 1330 04 11 80 1330 19 11 80 1200	09 12 80 1100 06 01 81 1050 27 01 81 1200 17 02 81 1100 10 03 81 1100	21 03 81 1420 07 04 81 1330 22 04 81 1000 22 04 81 1005 05 05 81 1045	20 05 81 1130 07 06 81 1115 01 07 81 1030 06 07 81 1345 21 07 81 1235 08 08 81 1150 25 08 81 1315 22 09 81 1315 14 10 81 1415	03 11 81 1130 24 11 81 1130 16 12 81 0930 02 02 82 1200 22 02 82 1200 16 03 82 1130 04 04 82 1300 26 04 82 0930

STATION OOATOSBN2245 LAT, 50D 25M 55S LONG. 112D 13M 19S PR 3 UTM 12 413200E 5587150N BOW RIVER AT BOW CITY BRIBGE NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

14105L SILICA REACTIVE SIO2 MG/L			6.0.4.4.4.5.0.9.0.9.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	44444 4	ww4r 60454		3 3 3 3 7 7	aario
17206L CHLORIDE DISSOLVED CL MG/L					8.5.2 4.5.2 6.5.2	1044W 04400	V W W W W	N. 4 M. 0. M
02041L SPECIFIC CONDUCT. US/CM	349. 351. 391. 388. 409.	409. 417. 415. 465.	496. 500. 534. 535.	478. 445. 443. 445. 431.	362. 365. 386. 407.	325. 320. 320. 319.	319. 256. 271. 299. 281.	279. 261. 257. 266.
101511 ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	0.0.0.0	40000	00000	00000	000	0.00.00.00.	10. 10. 4.5. 4.5. 4.5. 5.	7.3 6.0 12.3 6.2
10106L ALKALINITY TOTAL CACO3 MG/L	107. 107. 136. 136.	125. 133. 134. 120.	162. 161. 145. 155.	117. 139. 140. 120.	110. 01L 110. 01L 130. 01L 140. 01L	130. 01L 110. 01L 109. 01L 115. 01L	118. 01L 80. 01L 98. 01L 96. 01L	96. 01L 78. 01L 74. 01L 81. 01L
06152F CARBON DISSOLVED INORGANIC C C MG/L			39. 53L 41. 52L 43. 53L 35. 52L 28. 53L	30. 52L 26. 53L 27. 52L 23. 53L 23. 52L	18. 53L 19. 52L 28. 53F 28.	24. 22. 53F 22. 23. 52L 22.	23. 15. 52L 18. 20. 18.	19. 15. 13. 52L 15.
10301L PH PH UNITS	00000 WW000	88888 8888	7.7.7.7 8.7.7.7.9.0	7.7 7.7 7.7 7.7	7.77 7.77 7.6 8.8	8.7 8.0 8.0 8.2	8.99.2 9.17.7	H 1 5 H 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	24 09 79 1305 24 09 79 1310 09 10 79 1355 09 10 79 1400 29 10 79 1355	29 10 79 1400 19 11 79 1225 19 11 79 1230 10 12 79 1325 10 12 79 1330	08 01 80 1125 08 01 80 1130 29 01 80 1035 29 01 80 1040 19 02 80 1035	19 02 80 1040 11 03 80 1025 11 03 80 1030 25 03 80 0910 25 03 80 0915	09 04 80 1020 09 04 80 1025 22 04 80 1125 22 04 80 1130 06 05 80 1905	06 05 80 1910 21 05 80 1555 21 05 80 1600 03 06 80 1500 17 06 80 1230	02 07 80 1230 14 07 80 1435 15 07 80 1300 29 07 80 1310 12 08 80 1340	12 08 80 1345 26 08 80 1315 07 09 80 1345 09 09 80 1230

PAGE 93

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

PR 3 UTM 12 413200E 5587150N STATION 00AT05BN2245 LAT. 50D 25M 55S LONG. 112D 13M 19S BOW RIVER AT BOW CITY BRIBGE

14105L SILICA REACTIVE SIO2 MG/L	11.15 7.4.1.15	พ44พഗ พ4600	0.52	4.00.1 5 10.1 5	
17206L CHLORIDE DISSOLVED CL MG/L	44400	7 7 4 4 9 5 7	พพ44พ >> ถ่นั้นกัจ	**************************************	6.4 14. 8.1 8.8 7.4 7.7 9.6
02041L SPECIFIC CONDUCT. US/CM	364. 339. 400. 401.	507. 424. 393. 398.	400 400 400 400	402. 308. 323. 316. 295. 311. 303. 350.	405. 421. 469. 512. 427. 396. 405. 405.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	7.16	00000	.0 .0 .3.3 .11.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000 0000
10106L ALKALINITY TOTAL CACO3	127. 01L 112. 01L 132. 01L 135. 01L 138. 01L	174. 01L 145. 01L 134. 01L 130. 01L 127. 01L	133. 011 132. 011 134. 011 141. 011	135. 011 121. 011 128. 011 126. 011 116. 011 123. 011 120. 011 117. 011 107. 011	
06152F CARBON DISSOLVED INORGANIC C MG/L	2 2 2 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3. 3. 3. 3. 3.	41. 31. 31.	ကိုတ်လဲလဲလဲ တိတ်ဆွဲလွှဲလ် ကိုလ်လဲကိုကို လိလ်လိလ်လ်	33 4.65.53. 33.1.33.25.55.33.55.55.33.55.55.55.55.55.55.55.55
10301L PH PH UNITS	8 6 8 8 8 9 6 8 8 8	8.2 7.9 7.8 8.1	88888 24776	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	88.00 10.00
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0425 0425 0426 0426 0426 0426 0426
	1145 1215 1330 1200	1100 1050 1200 1100	1420 1330 1000 1005	11130 1115 1115 11345 11235 11150 1130 1130	
PLE DA					
SAMPLE DATE MST M Y HR	9 80 0 80 1 80 1 80	2 80 1 81 2 81 3 81	88118	7 7 8 8 1 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
SAI	7 10 10 11 10 11 11 9 11	9 12 5 01 7 01 7 02 0 03	7 0 0 4 0 0 5 0 0 5 0 0 5	100000000000000000000000000000000000000	
	23 07 21 04 19	09 06 27 17 10	21 07 22 22 22 05	20 07 00 01 00 01 00 03 03 13 14	03 24 16 00 02 02 16 04 04

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 458400E 5543500N	
458400E	
UTM 12	
PR 3	
34M 52S	
0111 ·	
395 LONG	
50D 2M 3	
LAT. 5	BRIDGE
T05BN2270	T RONALANE B
TION DOA	I RIVER A

07506L NITROGEN TOTAL AMMONIA N	<u> </u>			1 51111	וְנְינִינִי	orrivo	wwoor	31.0
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	.02 19F .01 .33 19F .35	.40 .19 19F .10 19F	.06 19F .03 19F L.01 19F	L.01 L.01 L.01 .02 .03	.64 19F .65 1.3 19L 1.4 10L 1.6 19L	1.60 10L 1.4 19L 1.5 19L 1.5 19L	1.4 1.4 1.5 1.6 1.7 1.1 1.1	1.1 10L .68 10L .74 10L 1.4 19F
07661F NITROGEN DISSOLVED N MG/L	.23 51F .48 .50 51F	.60 51F .37 .40 51F .36	. 31	.37 51F .24 .25 51F .30	.91 .90 51F 1.6 61L 1.6 51L 2.8 61L	2.5 511 1.9 611 2.1 511 1.7 511	1.6 61L 1.5 51L 2.2 51L 1.8 61L	1.7 51L 1.5 61L 1.5 51L 1.0
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.013 66F .008 .017 66F .016	.026 66F .017 .032 66F	.014 66F .017 .005 66F .004	.008 .003 66F L.003 .006 66F	.005 66F .003 .077 66L .071 56L .15 66L	.14 56L .14 66L .13 56L .16 66L .15 56L	.13 66L .13 56L .20 56L .20 56L .38 66L	.17 56L .084 66L .067 56L .083 66F
15356F PHOSPHORUS DISSOLVED INORG, PO4 P MG/L	.016 46F .011 .013 46F .015	.043 .030 46F .025 .034 46F	.017 46F .024 .011 46F .013	.015 .010 46F .005 .009	.008 46F .007 .083 46L .079 56L	.14 56L .15 46L .14 56L .16 46L .15 56L	.14 46L .20 46L .20 56L .18 46L	.19 56L .086 46L .077 56L .10 46F
15103F PHOSPHORUS DISSOLVED P MG/L	.019 13F .021 .028 13F .057 13F	.062 .035 13F .04 13F	.034 13F .033 .027 13F .028	.029 .021 13F .019 .023 13F	.016 13F .016 .092 13L .085 03L	.17 03L .15 13L .15 03L .17 13L	.14 13L .19 03L .21 13L .21 03L	.20 03L .098 13L .13 03L .12 13F
15301L PHOSPHORUS TOTAL INDRGANIC P MG/L	.022 .018 .066 .073	.099 .071 .068 .08	.022 .021 .024 .017	.025 .010 .012 .030	.012	.16 .14 .18 .17	.177	3,4,0
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.034 .036 .092 .081	.077	.036 .036 .038 .038	.038 .026 .056 .056	.020	200.116	E 6 4 4 5 2 5 5 8 5 5 5 8 5 5 5 8 5	. 21
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	15 05 79 1600 15 05 79 1635 29 05 79 1225 29 05 79 1226 12 06 79 1230	12 06 79 1305 26 06 79 1130 26 06 79 1210 10 07 79 1025 10 07 79 1040	24 07 79 1105 24 07 79 1120 06 08 79 1050 06 08 79 1110 21 08 79 1300	21 06 79 1315 24 09 79 0925 24 09 79 0930 09 10 79 1625 09 10 79 1630	30 10 79 1025 30 10 79 1030 19 11 79 1425 19 11 79 1455 10 12 79 1455	10 12 79 1500 08 01 80 1325 08 01 80 1330 29 01 80 1240 29 01 80 1245	19 02 80 1225 19 02 80 1230 11 03 B0 1240 11 03 80 1245 25 03 80 1045	25 03 80 1050 09 04 80 1245 09 04 80 1250 22 04 80 1555

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 458400E 5543500N PR 3 2M 39S LONG. 111D 34M 52S STATION 00AT05BN2270 LAT. 50D BOW RIVER AT ROWALANE BRIDGE

07506L NITROGEN TOTAL AMMONIA N					44400	,		2111
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	1.0 .24 19F .23 .01 19F L.01	.39 10L .38 .07 L.01 10L	1.01 1.01 1.01 1.01	.10 L.01 .98 .90	1.3 7.55 7.87 .90	3.0 1.0 .86 .80 .80	.01 .42 .28 .02 L.01	. 27 . 40 . 02 . 03
07661F NITROGEN DISSOLVED N	1.6 51F .39 51F .28 51F .28 51F	.61 61L .42 .23 .26 61L	.29 .17 .36 61L .26	.45 1.2 1.1	ଷ୍ଟ୍ର	1.3	.20 .70 .40 .17	. 39 . 177
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.040 66F .026 .013 66F	.030 56L .021 .003 56L .003 56L	L.003 L.003 L.003 56L	L.003 L.003 .045 .067	.15	.13 .12 .09 .095	.054 .013 L.003	.018 .009 .011
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.096 .040 46F .020 46F	.031 56L .027 L.003 .005 56L	.005 .003 .003	L.003 .004 .058 .067	.12 .12 .084	. 15 . 12 . 099 . 082		.027 .011 .011
15103F PHOSPHORUS DISSOLVED P MG/L	.11 .050 13F .047 .038 13F	.038 03L .031 .018 .010 03L	.020 .011 .010 .008 03L	.006 .008 .005 .091	.16 .13 .15	.16 .114 .114	. 0490 . 0255 . 0055	.028 .027 .015
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.32 .08	.15 .14 L.003 .011	. 018 . 016 . 008	.027 .016 .15 .12	.17 .15 .15 .15	.18 .16 .15 .094	.079 .13 .11 .040	.069 .067 .026
15406L PHOSPHOROUS TOTAL PHOSPHATE P	.32 .11 .062 .055	.15 .046 .020	.026 .030 .023 .012	.036 .027 .16 .15	1188	. 21 . 16 . 15 . 15	.11 .14 .12 .052	.075 .10 .029
SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	22 04 80 1600 06 05 80 1105 06 05 80 1110 22 05 80 0825 22 05 80 0830	04 06 80 0830 18 06 80 1045 03 07 80 0800 14 07 80 1520 16 07 80 0945	30 07 80 1015 13 08 80 0900 27 08 80 0915 07 09 80 1430 10 09 80 0830	24 09 80 0930 08 10 80 0830 22 10 80 0940 04 11 80 1630 19 11 80 0930	09 12 80 1430 06 01 81 1400 06 01 81 1405 27 01 81 1405 27 01 81 1405	17 02 81 1500 10 03 81 1400 22 03 81 0920 07 04 81 1530 22 04 81 1240	05 05 81 1245 20 05 81 1330 07 06 81 0915 01 07 81 1230 06 07 81 1440	21 07 81 1515 08 08 81 0945 25 08 81 1130 31 08 81 1405

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3 UTM 12 458400E 5543500N 2M 39S LONG. 111D 34M 52S STATION 00AT05BN2270 LAT. 50D BOW RIVER AT RONALANE BRIDGE

07506L NITROGEN TOTAL AMMONIA N	1. 2. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	'n
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	.01 1.04 1.5 1.6 1.6 1.6 1.6	1.5
0761F NITROGEN DISSOLVED N	28 25 25 1.29 1.7 1.7 1.9	1.8
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 L.003 .005 .043 .14 .11 .22 .18 .19	.23
15356F PHOSPHORUS DISSOLVED INORG, PO4 P MG/L	.006 .005 .009 .047 .14 .13	.24
15103F PHOSPHORUS DISSOLVED P MG/L	.018 .012 .010 .050 .17 .11 .23	.25
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.017 .027 .027 .027 .18 .18	.30
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 028 . 028 . 040 . 040 . 20 . 20 . 21 . 21	. 32
SUBM	0426 0426 0426 0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	22 09 81 1300 22 09 81 1305 14 10 81 1200 03 11 81 1400 24 11 81 1400 09 01 82 0900 09 02 82 1500 22 02 82 1500 16 03 82 1300	04 04 82 1100 26 04 82 1040

06104F CARBON DISSOLVED ORGANIC	MG/L																
06902F CARBON ORGANIC PARTICULATE	MG/L																
07902F NITROGEN PARTICUL.	MG/L	90.	.08	.22	.19		.16	.18	.19	.07		0.04		10.7		90.	
10501L RESIDUE FIXED NONFILTR.	MG/L	ri .	ri.	23.	14.	19.	20.	10.	12.	2.	.11	[].		.17	2.	.1.	2.8
10401L RESIDUE NONFILTR.	MG/L	4.	. 9	27.	17.	24.	26.	17.	20.	4.	2.	[].	.17	3.4	L1.	.1.	4.6
02073L TURBIDITY	חבר	6.1	7.5	25.	21.	21.	25.	13.	12.	3.4	3.8			1.6	1.6	1.5	1.1
02061S TEMPERATURE OF WATER	DEG.C.	17.	17.	16.	16.	21.	21.	21.5	21.5	22.5	22.5	17.5	17.5	22.5	22.5	23.5	23.5
SUBM	10	0426	0456	0456	0456	0456	0426	0456	0456	0456	0426	0426	0456	0456	0456	0426	0456
SAMPLE DATE	D M Y HR	79	05 79	05 79	05 79	90	62 90	90	26 06 79 1210	07	07	07	07	06 08 79 1050	08	08	21 08 79 1315

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 3 UTM 12 458400E 5543500N STATION 00AT05EN2270 LAT. 50D 2M 39S LONG. 111D 34M 52S BOW RIVER AT ROMALANE BRIDGE

06104F CARBON DISSOLVED ORGANIC C MG/L		3. 06L 1. 06L 1. 06L 1. 06L 1. 06L 1. 06L 2. 04L 2. 04L	4. 06L 5. 06L 2. 06F 2. 06F 3. 06F 3. 04L	
06902F CARBON ORGANIC PARTICULATE C MG/L		.28 02L .24 02L .97 02L .41 02L 1.9 02L	6.1 02L 8.2 1.3 .49 02L 2.0	.73 .24 02L .21 .35 .75 .70 .36 02L .37
07902F NITROGEN PARTICUL. N MG/L	.04 .28 .07 .08 02L	.06 02L .04 02L .18 02L .07 02L	2.6 02L 1.2 .23 .09 .10 02L .23	.14 .07 02L .05 .06 .10 .11 .10 .08 02L .06
10501L RESIDUE FIXED NONFILTR.	2. 11. 13. 16. 16. 17. 18.	LI. LI. 25. 99. 111. 110.	148. 137. 151. 151. 32. 36. 11. 12. 85.0	18.0 2. 11. 5. 17. 5.
10401L RESIDUE NONFILTR. MG/L	6. 11. 10. 10. 11. 22. 33.	LI. 2. 6. 11. 11. 14. 14.	159. 167. 167. 165. 38. 41. 11. 11.	19.0 2. 1. 7. 18. 7. 7. 4.
02073L TURBIDITY JTU	4 4 1 6 6 6 9 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4,0 4,1 4,1 7,1 31.5 30.0	4.5 5.0 1.5 1.9 1.9 6.0 6.0 6.0 4.5 4.5	9.5 1.8 7.4 7.0 5.7 6.5
02061S TEMPERATURE OF WATER DEG.C.	0 0 1 1 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		2. 61F 2. 61F 11. 61F 11. 61F 16. 61F 14. 61F 20. 61F	0 00 0
SUBM	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426
PLE MST	24 09 79 0925 24 09 79 0930 09 10 79 1625 09 10 79 1625 30 10 79 1025 30 10 79 1425 19 11 79 1425 10 12 79 1455 10 12 79 1455	08 01 80 1325 08 01 80 1330 29 01 80 1240 19 02 80 1225 11 03 80 1245 11 03 80 1245 25 03 80 1045 25 03 80 1045	09 04 80 1245 09 04 80 1250 22 04 80 1555 22 04 80 1600 06 05 80 1105 22 05 80 0835 22 05 80 0836 04 06 0830 04 06 0830 04 06 0830	07 80 07 80 07 80 07 80 08 80 09 80 09 80

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 004T05BN2270 LAT. 50D 2M 39S LONG. 111D 34M 52S PR 3 UTM 12 458400E 5543500N BOW RIVER AT RONALANE BRIDGE

06104F CARBON DISSOLVED ORGANIC C	3 : 1 : 5 : 5		i ณ ณ ณ พ	ว ์ที่ที่ที่ผู้	ที่ณีที่ที่ที่	ઝં ઝંંં તું જે	ณ่พระเท่พ่
06902F CARBON ORGANIC PARTICULATE C MS/L	.46 2.7 1.1 .61	.51 .66 .51 .81	1.0 .57 1.4 .42	4.0.1 0.0.1 0.0.0	.90 .57 .50 .50	1.3	. 24
07902F NITROGEN PARTICUL. N MG/L	.14 .39 .16 .12	.06	.12 .09 .13 .13	.29 .24 .11 .15	.13 .07 .08 .08		L.01 .13 .16 .58
10501L RESIDUE FIXED NONFILTR. MG/L	2 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		6 6 4 4 5 9 5 9 5 9 5 9 5 9 5 9 5 9 5 9 5 9	69. 155. 51. 24.	30. 7. 65.		4. 10. 12. 13.
10401L RESIDUE NONFILTR. MG/L	65. 29. 11.	13. 11. 16. 20.	မှ တွင် ရှိ ရှိ ကို လို ရှိ	77. 160. 54. 28. 48.	35. 6. 6.	4 H 5 6 6	4. 12. 15. 15.
02073L TURBIDITY JTU	4.80 4.00 4.00 4.00 7.00	6.6 6.0 7.7 10.0	9.59 18.0 23.8 3.8	40. 67. 24. 23.	ชุง พ.พ. พัพ. พัพ	7.7. 7.5. 1.55 1.55	2.9 3.7 14. 14.
02061S TEMPERATURE OF WATER DEG.C.	15. 61F 6. 61F 0. 61F	0. 61F	7.0 61F 12.0 61F 13.0 61F	16.0 61F 14.0 61F 18.0 61F 22.0 61F	21. 61F 21. 61F 18.1 61F 13. 61F	5. 61F .0 61F	.0 61F .0 61F 5.0 61F 5.0 61F
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	08 10 80 0830 22 10 80 0940 04 11 80 1630 19 11 80 0930 09 12 80 1430	06 01 81 1400 06 01 81 1405 27 01 81 1400 27 01 81 1405 17 02 81 1500	10 03 81 1400 22 03 81 0920 07 04 81 1530 22 04 81 1240 05 05 81 1245	20 05 81 1330 07 06 81 0915 01 07 81 1230 06 07 81 1440 21 07 81 1515	08 08 81 0945 25 08 81 1130 22 09 81 1300 22 09 81 1305	14 10 B1 1200 03 11 B1 1400 24 11 B1 1400 15 12 B1 1500 09 01 82 0900	02 02 82 1500 22 02 82 1300 16 03 82 1300 04 04 B2 1100 26 04 82 1040

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2 3 UTM 12 458400E 5543500N PR 2M 39S LONG. 111D 34M 52S STATION 00AT05EN2270 LAT. 50D BOW RIVER AT RONALANE BRIDGE

14105L SILICA REACTIVE SIO2 MG/L						ы ы ы ы н и о и	W 4 4 4 4 W 0 W 4 0	4 W W 4 0 0 0 4
17206L CHLORIDE DISSOLVED CL MG/L								6.0 6.0 7.4
02041L SPECIFIC CONDUCT. US/CM	349. 349. 337. 337.	332. 330. 315. 290.	320. 321. 366. 353.	309. 388. 389. 436.	451. 449. 420. 420. 501.	499. 516. 518. 481. 487.	486. 487. 466. 466.	435. 386. 384. 385.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	0.00	.0 18. 15. 42. 53.	54 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	0.000	00000	00000	00000	000.
10106L ALKALINITY TOTAL CACO3	99. 99. 115. 116.	110. 107. 108. 75.	72. 70. 80. 85.	84. 114. 114. 136.	132. 131. 133. 123.	118. 164. 166. 153.	112. 116. 148. 136.	110. 110. 01L 110. 01L 130. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L						40. 53L 40. 53L 36. 53L 35. 52L	29. 53L 29. 52L 27. 53L 28. 52L 22. 53L	23. 52L 19. 53L 20. 52L 28. 53F
10301L PH PH UNITS	0 0 × 0 0 0 × 0 0 0 0 0 0 0 0 0 0 0 0 0	w o o o o w o u w o	00100	0 0 0 0 0 0 4 4 0 0 0 0	00000 04001	6.7.7.7 1.8.8.8.8.	0.7.7.7. 0.8.7.7.7. 7.	7.6 7.7 7.8 7.6
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	15 05 79 1600 15 05 79 1635 29 05 79 1225 29 05 79 1226 12 06 79 1230	12 06 79 1305 26 06 79 1130 26 06 79 1210 10 07 79 1025 10 07 79 1040	24 07 79 1105 24 07 79 1120 06 08 79 1050 06 08 79 1110 21 08 79 1300	21 08 79 1315 24 09 79 0925 24 09 79 0930 09 10 79 1625 09 10 79 1630	30 10 79 1025 30 10 79 1030 19 11 79 1425 19 11 79 1430 10 12 79 1455	10 12 79 1500 08 01 80 1325 08 01 80 1330 29 01 80 1240 29 01 80 1245	19 02 80 1225 19 02 80 1230 11 03 80 1245 11 03 80 1245 25 03 80 1045	25 03 80 1050 09 04 80 1245 09 04 80 1250 22 04 80 1555

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00ATO5BN2270 LAT. 50D 2M 39S LONG. 111D 34M 52S PR 3 UTM 12 458400E 5543500N BOW RIVER AT RONALANE BRIDGE

14105L SILICA REACTIVE SIO2 MG/L	ကု ကို ထို ထို ထို	44.8 4.80.1 4.80.4	9.1.	11.2.66	33.8	3.8 1.3 2.5	1.5	3.2
17206L CHLORIDE DISSOLVED CL MG/L	N W W 4 4 N O W O O	7 H 7 W 7 7 8 5 8 0	4 4 4 .0 4 .0 4 .0 4 .0 4 .0 4 .0 4 .0	0 0 3 7 8 0	8 W W W W	7.5.1.5.5.1.5.7.5.1.5.7.5.1.5.7.5.1.5.7.5.1.5.7.5.7	20.00	H M O 6.
02041L SPECIFIC CONDUCT. US/CM	407. 339. 340. 375. 374.	342. 324. 351. 364.	369. 335. 316. 351.	398. 369. 418. 412.	512. 435. 404. 410.	405. 390. 411. 417.	355. 399. 315. 330.	319. 317. 311.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L			40.01 40010	0.0.0.0.0.0	00000	0.	23.0	3.10
10106L ALKALINITY TOTAL CACO3 MG/L	130.01L 130.01L 130.01L 107.01L	117. 011 119. 011 120. 011 103. 011	110. 011 101. 011 93. 011 116. 011 89. 011	125. 01L 110. 01L 135. 01L 138. 01L 143. 01L	178. 011 145. 011 145. 011 135. 011 137. 011	129. 01L 129. 01L 131. 01L 134. 01L 136. 01L	115. 011 129. 011 123. 011 124. 011 117. 011	120. 01L 122. 01L 115. 01L 109. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L	30. 23. 53F 24. 22. 53F 23.	23. 52L 23. 23. 21. 52L 23.	22. 21. 20. 18. 52L 17.	25. 36. 36.	3.6. 3.6. 3.6.	32. 37. 41. 33.	26. 31. 29. 28.	32. 29. 26.
10301L PH PH UNITS	6.8 7.8 7.8 7.8 7.8	8.2 8.7 9.0 4.4	88.0 7.8 8.0 9.0 9.0	8 8 8 8 8 4 7 7 7 5	8.0 8.0 8.1	7.88 8.3 8.3 9.9	9.0000 9.0000	8 8 8 9 4 7 6 0
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	22 04 80 1600 06 05 80 1105 06 05 80 1110 22 05 80 0825 22 05 80 0830	04 06 80 0830 18 06 80 1045 03 07 80 0800 14 07 80 1520 16 07 80 0945	30 07 80 1015 13 08 80 0900 27 08 80 0915 07 09 80 1430 10 09 80 0830	24 09 80 0930 08 10 80 0830 22 10 80 0940 04 11 80 1630 19 11 80 0930	09 12 80 1430 06 01 81 1400 06 01 81 1405 27 01 81 1405 27 01 81 1405	17 02 81 1500 10 03 81 1400 22 03 81 0920 07 04 81 1530 22 04 81 1240	05 05 81 1245 20 05 81 1330 07 06 81 0915 01 07 81 1230 06 07 81 1440	21 07 81 1515 06 08 81 0945 25 08 81 1130 31 08 81 1405

PH DIC ALK COND CL SIO2

PR 3 UTM 12 458400E 5543500N STATION 00ATOSBN2270 LAT. 50D 2M 39S LONG. 111D 34M 52S BOW RIVER AT RONALANE BRIDGE

14105L SILICA REACTIVE SIO2 MG/L	च कं 4 रु में प	M404E	3.2
17206L CHLORIDE DISSOLVED CL MG/L	ម្នេក ក្រុង មួយ មួយ មួយ មួយ មួយ មួយ មួយ មួយ មួយ មួយ មួយ មួយ មួយ	8.0 6.7 6.3 8.0 8.0	10.
02041L SPECIFIC CONDUCT. US/CM	338. 425. 425. 428.	457. 542. 432. 411. 399.	414.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 HG/L			
10106L ALKALINITY TOTAL CACO3 MG/L	105. 01L 105. 01L 131. 01L 140. 01L	168. 01L 203. 01L 160. 01L 140. 01L 135. 01L	130. 01L 115. 01L
06152F CARBON DISSOLVED INORGANIC C	24. 27. 33.	39. 35. 31.	32.
10301L PH PH UNITS	00000	87.7.7. 1.7.3.3.	7.6
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	22 09 81 1300 22 09 81 1305 14 10 81 1200 03 11 81 1400 24 11 81 1400	15 12 81 1500 09 01 82 0900 02 02 82 1500 22 02 82 1300 16 03 82 1300	04 04 82 1100 26 04 82 1040

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS H

LONG. 112D 51M 42S PR 3 UTM 12 363050E 5396700N ABOVE LETHBRIDGE STP OUTFALL STATION 00AT05AD2035 LAT. 48D 42M 37S OLDMAN RIVER AT HIGHWAY #3,

07506L NITROGEN TOTAL AMMONIA N								
07110F NITROGEN DISSOLVED NO3 & NO2 N	.08 19F .05 19F .08 19F	.05 19F .08 19F .02 19F	L.01 19F .01 L.01 19F .01 L.01 19F	L.01 19F .01 19L .04 19L	.08 19L .09 10L .21 19L .21 10L .28 19L	.28 10L .29 10L .32 19L	.17 19L .17 10L .01 19L .01 10L L.01 19L	.01 10L .06 19F .12
07661F NITROGEN DISSOLVED N MG/L	.25 .18 51F .16 51F .15 51F	.15 51F .19 .24 51F .13 51F	.12 .16 51F .15	.11 51F .16 .12 51F .11 61L .14 51L	.25 61L .30 51L .41 61L .39 51L	.35 51L .45 51L .37 61L .38 51L	.44 61L .45 51L .18 61L .21 51L .32 61L	.24 51L .30 .33 51F .13 61L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 66F L.003 L.003 66F L.003 66F	L.003 66F L.003 66F L.003 66F L.003	L.003 66F L.003 66F L.003 66F	L.003 66F L.003 66F L.003 66L L.003 56L	L.003 66L L.003 56L L.003 56L L.003 56L	L.003 56L L.003 56L L.003 56L	L.003 66L L.003 56L L.003 56L L.003 56L	.004 56L L.003 66F L.003
15356F PHOSPHORUS DISSOLVED INORG. PG4 P	L.003 46F L.003 46F L.003	.005 L.003 46F L.003 46F L.003	.004 46F .003 56L L.003 46F L.003 46F	L.003 .004 46F L.003 46L L.003 56L	L.003 46L .003 56L .004 56L .004 56L	.003 56L .003 46L .007 56L .003 46L .003 56L	.009 46L .006 56L .004 46L .005 56L .003 46L	.011 56L .006 46F L.003
15103F PHOSPHORUS DISSOLVED P MG/L	.007 13F .008 .008 13F	L.003 13F L.003 .008 13F L.003	.005 13F .008 13F .004 13F	.005 .006 13F .003 .003 .004 .004	L.003 13L .004 03L .004 13L .007 03L L.003 13L	.011 03L .003 13L .003 13L .003 13L	.012 13L .017 03L .006 13L .006 03L	.011 03L .008 13F .007
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.112 .12 .070 .19	.020 .019 .011 .005	.012 .001 .009 .012	.007 .009 .003 .003	000 000 000 000 000 000 000	.003 .007 L.003	.015 .013 .013	.015
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.21 .19 .225 .20	.020 .022 .03 .018	.015 .017 .016 .015	. 009 . 017 . 002 . 006	000. 4000. 7000.	.015 .006 .007 .011	.026 .034 .019 .023	.026
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	23 05 79 0830 23 05 79 0900 05 06 79 1335 05 06 79 1400 19 06 79 1120	19 06 79 1140 05 07 79 1305 05 07 79 1315 18 07 79 1105 18 07 79 1120	31 07 79 1545 31 07 79 1600 18 09 79 1340 18 09 79 1345 02 10 79 1255	02 10 79 1300 18 10 79 0925 18 10 79 0930 06 11 79 1325 06 11 79 1330	27 11 79 0855 27 11 79 0900 18 12 79 0925 18 12 79 0930 15 01 80 1055	15 01 80 1100 05 02 80 0940 05 02 80 0945 26 02 80 0910 26 02 80 0915	18 03 80 1325 18 03 80 1330 01 04 80 0905 01 04 80 0910 15 04 80 0955	15 04 80 1000 29 04 80 1425 29 04 80 1430 13 05 80 1320

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

	07506L NITROGEN TOTAL AMMONIA N								
	07110F NITROGEN DISSOLVED NO3 % NO2 N	.01 10L .18 19L .17 10L .04 10L		L.01 .03 L.01	90: 111 111 111	. 14 L.01 . 02 . 01	0.000 8000 8000 8000 8000 8000 8000	L.01 L.01 L.01	.02 .20 3.0
Noo	07661F NITROGEN DISSOLVED N	.09 51L .35 61L .32 51L .21 61L	.10 .23 .12 .12	.06 .15 .16 .10	.13 .14 .29 .32 .32	.13 .16 .16	.17 .17 .23 .57	.20 .12 .10 .13	ይ የ ይ የ
UTH 12 363050E 5396700N	15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	L.003 56L L.003 56L L.003 56L L.003 56L	L. 003 L. 003 L. 003	L.003 L.003 L.003	L.003 L.003 L.003	L.0033 L.0033 L.0033	L. 003 L. 003 L. 005	L.003 L.003 L.003	L.003 L.003 .005
112D 51M 42S PR 3 UTH 12 LETHBRIDGE STP OUTFALL	15356F PHOSPHORUS DISSOLVED INORG, PO4 P	.003 56L .003 56L .003 56L	L.003 L.003 L.003	L.003 L.003 L.003	. 005 . 004 . 006 L. 003	L.003 L.003 L.003	L.003 .003 L.003	L.0003 L.0003 L.0003	.003 L.003 .005
	15103F PHOSPHORUS DISSOLVED P MG/L	.005 03L .006 13L .004 03L .003 03L	L.003 L.003 .003	L.003 L.003 L.003	. 006 . 009 . 006	L.003 L.003 .004	.005 .004 .011 .019	L. 003 L. 003 L. 003	.005 .005 .005
LONG. ABOVE	15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.028 1.8 .052 L.003	700. 500. 600.	.005 .003 .011 .010	.005	.004	. 049 . 076 . 33 . 20	.013 .007 .003	.013 L.003 .008
LAT. 48D 42H 37S	15406L PHOSPHOROUS TOTAL PHOSPHATE P	2.0 2.0 2.0 .064	.009	.0068	.010 .011 1.1 .025 .053	.007 .021 .011	.055 .38 .26	.024 .0014 .007 .008	.024 .007 .015
AD2035 T HIGHWAY	SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
STATION 00AT05AD2035 OLDMAN RIVER AT HIGH	SAMPLE DATE MST D M Y HR	13 05 80 1325 27 05 80 1355 27 05 80 1400 10 06 80 1330 24 06 80 1320	08 07 80 1455 08 07 80 1500 22 07 80 1330 06 08 80 1330 19 08 80 1210	03 09 80 1215 16 09 80 1200 30 09 80 1600 15 10 80 1215 30 10 80 1220	11 11 80 1600 25 11 80 1320 16 12 80 1530 13 01 81 1310 03 02 81 1400	22 02 81 1700 15 03 81 1330 02 04 81 1400 14 04 81 1430 28 04 81 1330	28 04 81 1335 12 05 81 1315 26 05 81 1630 16 06 81 1315 13 07 81 1345	28 07 81 1530 16 08 81 1410 09 09 81 1200 29 09 81 1400 20 10 81 1515	11 11 81 0900 30 11 81 0830 14 12 81 1300 09 01 82 1600

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

LONG. 112D 51M 42S PR 3 UTM 12 363050E 5396700N ABOVE LETHBRIDGE STP OUTFALL STATION 00AT05AD2035 LAT. 48D 42M 37S OLDMAN RIVER AT HIGHWAY #3,

07506L NITROGEN TOTAL AMMONIA N MG/L	::::::
07110F NITROGEN DISSOLVED NO3 & NO2 N	.29 .31 .20 .12
07661F NITROGEN DISSOLVED N MG/L	.48 .32 .36
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 L.003 L.003
15356F PHOSPHORUS DISSOLVED INORG, PO4 P	L.0003
15103F PHOSPHORUS DISSOLVED P MG/L	L.003 L.003 .009 .011
15301L PHCSPHORUS TOTAL INORGANIC P MG/L	.017 L.003 .011 .017
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.005 .006 .021 .025
SUBM	0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	10 02 82 1130 23 02 82 1430 23 03 82 0930 03 04 82 1030 27 04 82 1400

06104F CARBON DISSOLVED ORGANIC C MG/L					
06902F CARBON ORGANIC PARTICULATE C MG/L					
07902F NITROGEN PARTICUL. N HG/L	.50 .48 .75 .84	. 09	90. 8. 0.	.04 .04 02L	.07 02L
10501L RESIDUE FIXED NONFILTR. MG/L	260. 152. 212. 22.	24. 23. 23.	1.2 [1.6 6.1.7	10 0 0 10 0	ii: .
10401L RESIDUE NONFILTR. MG/L	264. 288. 170. 233.	26. 31. 3.	1.6.1.6 6.1.4	6 m 9 9 6 6	
02073L TURBIDITY JTU	115. 110. 83. 82.	18. 4.5 5.6	2.1 6.1.9 6.2.1	ละเก๋ ซ พ. ก เก๋ น ล ก พ.	22.21.00.1.00.1.00.1.00.1.00.1.00.1.00.
02061S TEMPERATURE OF WATER DEG.C.	13. 15. 15. 15.	23.5 23.5 23.5 23.5	23. 23. 16.	12	00011
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	23 05 79 0830 23 05 79 0900 05 06 79 1335 05 06 79 1400 19 06 79 1120	19 06 79 1140 05 07 79 1305 05 07 79 1315 18 07 79 1105 18 07 79 1120	31 07 79 1545 31 07 79 1600 18 09 79 1340 18 09 79 1345 02 10 79 1255	02 10 79 1300 18 10 79 0925 18 10 79 0930 06 11 79 1325 06 11 79 1330	27 11 79 0855 27 11 79 0900 18 12 79 0925 18 12 79 0930

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

1 5396700N	
UTM 12 363050E	
12	
E	
PR 3	CUTFALL
. 112D 51M 42S	ABOVE LETHBRIDGE STP CUTFALL
LONG. 11	ABOVE L
LAT. 48D 42M 37S	
LAT.	# ? ·
STATION 00AT05AD2035	OLDMAN RIVER AT HIGHWAY

06104F CARBON DISSOLVED ORGANIC C MG/L	2. 06L 2. 04L 2. 04L 4. 06L	2. 04L 4. 06L 4. 06L 4. 06L 4. 06L	3. 06L 4. 04L 3. 06F 4.	2. 04L 2. 06L 2. 06L 2. 04L 2. 04L	. ં . ં . ં . ં	તંત્રં તંત્રં નં	. ં . ં . ં . ં	ที่ณีที่ณี
06902F CARBON ORGANIC PARTICULATE C MG/L	.22 02L .07 02L .19 02L	.42 02L	.50 02L 4.0 .50 02L	12.2 02L .56 02L 1.1	25. 25. 32. 32. 32. 32. 32. 32. 32. 32. 32. 32	52. 54. 52. 52. 53. 54. 55. 56.	.31 13.	3.6 .14 .41
07902F NITROGEN PARTICUL. N MG/L	.04 02L .02 02L .03 02L	.09 02L	.13 02L .41	1.3 02L .14 02L .11	0.05		. 06 1.1 0.3	.54 .05 .10
10501L RESIDUE FIXED NONFILTR.	%%;;;; 4	, i k 5 5 6	2. 5. 215. 213.	29. 3272. 2985. 73.0 72.0	4 N N V 6	ને છે જે મં <i>ર</i> ્	9. 10. 1870. 29. 25.	176. 3. 5.
10401L RESIDUE NONFILTR. MG/L	i .	13. 14. 12. 6.	3. 234. 231. 27.	32. 3425. 3135. 88.0	, 00 00 00 00 00 00 00 00 00 00 00 00 00	6. 17. 5.	11. 11. 1980. 31. 27.	186. 5. 5.
02073L TURBIDITY JTU	F 0 0 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	3.2 16. 17. 15.0 8.0	1.7 1.7 28.0 47.0 13.0	13.0 1250. 1250. 38.0 28.	4440W	3.4 9.7 3.8 15.	6.0 6.6 220. 14. 6.9	62.0 2.6 5.0 2.1
02061S TEMPERATURE OF WATER DEG.C.		.5 0. 0. 1. 61F 1. 61F	10. 61F	11. 61F 11. 61F 19. 61F 18. 61F	17.0 61F 20.0 61F	15. 61F 13. 61F 15. 61F 9. 61F 6. 61F	0. 61F	7.0 61F 7.0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	15 01 80 1055 15 01 80 1100 05 02 80 0940 05 02 80 0945 26 02 80 0910	26 02 80 0915 18 03 80 1325 18 03 80 1330 01 04 80 0905 01 04 80 0910	15 04 80 0955 15 04 80 1000 29 04 80 1425 29 04 80 1430 13 05 80 1320	13 05 80 1325 27 05 80 1355 27 05 80 1400 10 06 80 1330 24 06 80 1320	08 07 80 1455 08 07 80 1500 22 07 80 1330 06 08 80 1330 19 08 80 1210	03 09 80 1215 16 09 80 1200 30 09 80 1600 15 10 80 1215 30 10 80 1220	11 11 80 1600 25 11 80 1320 16 12 80 1530 13 01 81 1310 03 02 81 1400	22 02 81 1700 15 03 81 1330 02 04 81 1400 14 04 81 1430

28 12 26 16

28 18 09 29

111 30 14 09

23 23 03

23 05 05 19

05 05

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

LONG. 1120 51M 42S PR 3 UTM 12 363050E 5396700N ABOVE LETHBRIDGE STP OUTFALL STATION 00AT05AD2035 LAT. 48D 42M 37S OLDMAN RIVER AT HIGHWAY #3,

06104F CARBON DISSOLVED ORGANIC C MG/L	พพพฺษ๋๋๋๋๋	ાં મં ાં ાં મં	ાં ાં મં ાં નં	ผ่านค่อง	14105L SILICA REACTIVE SIO2	MG/L		
06902F CARBON ORGANIC PARTICULATE C MG/L	1.7 .87 2.3 6.4 4.8	.41 .49 .18 .21	.23 .38 .18 .16	. 23 . 47 . 98	17206L CHLORIDE DISSOLVED CL	MG/L		
07902F NITROGEN PARTICUL. N MG/L	.29 .23 .27 .58	88000		.05 .05 .08 .10	SPECIFIC CONDUCT.	US/CM	290. 279. 255. 257.	273. 446. 410. 371.
10501L RESIDUE FIXED NONFILTR.	108. 104. 179. 922. 419.	23. 25. 1.	8 y y y .	2. 13. 28.	10151L ALKALINITY PHENOL PHTHALEIN CACO3	MG/L	00000	0000
10401L RESIDUE NONFILTR. MG/L	118. 112. 195. 940. 452.	26. 23. 6. 5.	7. 9. 6. 8.0	5. 15. 32.	10106L ALKALINITY TOTAL CACO3	MG/L	107. 107. 96. 95.	114. 138. 124.
02073L TURBIDITY JTU	58. 55. 66. 270.	20.0 20.0 20.0 80.0	www.	22.55 2.56 5.56	06152F CARBON DISSOLVED INORGANIC C	1/9W		
02061S TEMPERATURE OF WATER DEG.C.	10.0 61F 10.0 61F 11.0 61F 13.0 61F	21.0 61F 21.0 61F 23. 61F 19. 61F 11. 61F	7.0 61F .0 61F .0 61F	.0 61F .0 61F 5. 61F 4.0 61F 11.0 61F	10301L PH	PH UNITS	8 4 7	8 7 8 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	SUBM	ID	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE NST D M Y HR	28 04 81 1330 28 04 81 1335 12 05 81 1315 26 05 81 1630 16 06 81 1315	13 07 81 1345 28 07 81 1530 18 08 81 1410 19 09 81 1200 29 09 81 1400	20 10 81 1515 11 11 81 0900 30 11 81 0830 14 12 81 1300 39 01 82 1600	10 02 82 1130 23 02 82 1430 23 03 82 0930 33 04 82 1030 27 04 82 1400	SAMPLE DATE	D M Y HR	23 05 79 0830 23 05 79 0900 05 06 79 1335 05 06 79 1400 19 06 79 1120	19 06 79 1140 15 07 79 1305 15 07 79 1315 18 07 79 1105

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

LONG. 112D 51M 42S PR 3 UTM 12 363050E 5396700N ABOVE LETHBRIDGE STP OUTFALL STATION 00AT05AD2035 LAT. 48D 42M 37S OLDMAN RIVER AT HIGHWAY #3,

14105L SILICA REACTIVE SIO2 MG/L				พศสสส ทัศทัศท	40.0000 40.0000	4	ww.q.w.w.	ମଧ୍ୟ ମଧ୍ୟ
17206L CHLORIDE DISSOLVED CL MG/L					ທ _{ີ່} ເປ	445.11 445.11 6	0 2 4 6 0	2.5 2.5 3.6 4.1
02041L SPECIFIC CONDUCT. US/CM	373. 354. 360. 398.	394. 433. 385. 435.	441. 515. 481. 496. 559.	532. 535. 470. 498.	489. 451. 450. 330.	581. 570. 289. 288.	312. 312. 310. 274. 265.	336. 337. 371.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	88 9.45 4.5	00000	00000		00000	0 M	0,,00	N. W.
10106L ALKALINITY TOTAL CACO3 MG/L	128. 116. 113. 129.	123. 121. 114. 114.	144. 142. 151. 186.	194. 194. 174. 172.	175. 120. 116. 120. 01L	170. 01L 170. 01L 120. 01L 120. 01L	111. 011 110. 011 109. 011 108. 011	128. 01L 128. 01L 129. 01L 117. 01L
06152F CARBON DISSOLVED INORGANIC C				46. 53L 42. 52L 39. 52L 32. 53L	33. 52L 26. 53L 27. 52L 21. 52L	36. 53L 37. 52L 22. 53F 22.	23. 52L 22. 53L 22. 52L 22. 52L 22.	28. 28. 28.
10301L PH PH UNITS	9 0 0 0 0 4 6 6 4 10	000000 000000	# 0 0 0 0 # 0 0 0 0	0.0.2.7 0.0.8.0.0.0	0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000 44000	0000 1107	8 8 8 8 8 8 8 8
SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	18 07 79 1120 31 07 79 1545 31 07 79 1600 18 09 79 1340 18 09 79 1345	02 10 79 1255 02 10 79 1300 18 10 79 0925 18 10 79 0930 06 11 79 1325	06 11 79 1330 27 11 79 0855 27 11 79 0900 18 12 79 0925 18 12 79 0930	15 01 80 1055 15 01 80 1100 05 02 80 0940 05 02 80 0945 26 02 80 0910	26 02 80 0915 18 03 80 1325 18 03 80 1330 01 04 80 0905 01 04 80 0910	15 04 80 0955 15 04 80 1000 29 04 80 1425 29 04 80 1430 13 05 80 1320	13 05 80 1325 27 05 80 1355 27 05 80 1400 10 06 80 1330 24 06 80 1320	08 07 80 1455 08 07 80 1500 22 07 80 1330 06 08 80 1330

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SI02 STATICN 00AT05AD2035 LAT. 48D 42M 37S LONG. 112D 51M 42S PR 3 UTM 12 363050E 5396700N OLDMAN RIVER AT HIGHWAY #3,

14105L SILICA REACTIVE SIO2 MG/L	1 2 2 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	ชบบพพ ซอ๋อ๋อ๋	WWH 0.0	97744 7717,0	11.2.4.0 1.1.2.4.0	44000	6 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
17206L CHLORIDE DISSOLVED CL MG/L	1.9 2.0 1.1 1.1	21111	8.1.2.1.8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.4.4.4.0	2.5 1.7 2.4 2.1 15.	0.00000
92041L SPECIFIC CONDUCT. US/CM	404. 390. 403. 330. 397.	342. 339. 375. 328. 342.	439. 433. 503. 464.	294. 290. 321. 276. 330.	315. 385. 355. 400. 438.	462. 393. 505. 477.	432. 414. 425. 453.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	2.0	ကုံတစ်စ်စ	w	00000	ы où~vùv	<i></i>	00000
10106L ALKALINITY TOTAL CACO3	134. 011 134. 011 136. 011 126. 011	131. 01L 134. 01L 142. 01L 120. 01L	167. 01L 131. 01L 189. 01L 168. 01L	120. 01L 120. 01L 129. 01L 116. 01L	129. 01L 160. 01L 140. 01L 147. 01L	159. 01L 151. 01L 181. 01L 189. 01L 331. 01L	180. 01L 145. 01L 155. 01L 155. 01L
06152F CARBON DISSOLVED INORGANIC C	28. 30. 31. 29.	33. 35. 34.	42. 32. 37. 46.	27. 26. 31. 28. 30.	31. 42. 36. 34. 25.	32. 25. 444. 444.	45. 37. 39. 37.
10301L PH PH UNITS	დდდ <u>დ</u> 44444	ซฺ ซฺ ซฺ ซฺ ซฺ ซฺ ซ๋ ฉ๋ ซ่ ซ่ ซ่ พ่ พ่ พ่	00000 004mm		000000 w 0 7 ri 4	88887 4 m m S I	7.88.0 11.8.0
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	19 08 80 1210 03 09 80 1215 16 09 80 1200 30 09 80 1600 15 10 80 1215	30 10 80 1220 11 11 80 1600 25 11 80 1320 16 12 80 1530 13 01 81 1310	03 02 81 1400 22 02 81 1700 15 03 81 1330 02 04 81 1400 14 04 81 1430	28 04 81 1330 28 04 81 1335 12 05 81 1315 26 05 81 1630 16 06 81 1315	13 07 81 1345 28 07 81 1530 18 08 81 1410 09 09 81 1200 29 09 81 1400	20 10 81 1515 11 11 81 0900 30 11 81 0830 14 12 81 1300 09 01 82 1600	10 02 82 1130 23 02 82 1430 23 03 82 0930 03 04 82 1030 27 04 82 1400

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

0-

PAGE

LONG. 112D 37M 24S PR 3 UTM 12 383300E 5523900N BELOW LETHBRIDGE (BELOW PICTURE BUTTE) STATION BOATOSAD2050 LAT. 490 51M 30S OLDMAN RIVER AT HIGHWAY #845,

07506L NITROGEN TOTAL AMMONIA N MG/L	=====			7.4444	ய்ய்ல்ல்ட்	พู่พู่จุ๋จฺจ๋	<i>ं ं</i> चं चं चं	ניממיי
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	.06 19F .06 .08	.01 19F .02 .01 19F	L.01 19F .08 .02 19F .01 L.01 19F	.01 .24 19F .24 .13 19L .14 10L	.20 19L .32 19L .33 10L .60 19L	.62 10L .5 19L .46 10L .46 10L	.25 19L .24 10L .09 19L .08 10L	.11 10L .10 19F .13
07661F NITROGEN DISSOLVED N	.18 51F .24 51F .15	.21 51F .12 .21 51F .16 .16 51F	.19 .30 51F .36 .45 51F	.18 51F .48 .47 51F .29 61L .32 51L	.53 611 .52 511 .85 611 .95 511	1.2 51L 1.0 61L 1.1 51L .91 51L .87 61L	.78 61L .70 51L .32 61L .35 51L	.43 51L .31 .37 51F .15 61L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	L.003 66F L.003 66F L.003 .008 66F	.006 66F .006 66F L.003 .057 66F	.010 66F .017 .16 66F .17	.094 .13 66F .13 .073 66L .074 56L	.11 66L .11 56L .19 66L .19 56L	.21 56L .22 66L .22 56L .22 56L .22 56L	.13 66L .12 56L .070 66L .075 56L .15 66L	.13 56L .017 66F .030 .017 66L
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	L.003 46F L.003 .005 46F .005	.010 L.003 46F L.003 .073 46F	.022 46F .011 .17 46F .17	.094 .14 46F .13 .084 46L .082 56L	.12 46L .19 46L .19 56L .21 46L	.21 56L .22 46L .23 56L .22 56L .22 46L	.14 46L .12 56L .087 46L .086 56L .16 46L	.15 56L .035 46F .041 .025 46L
15103F PHOSPHORUS DISSOLVED P MG/L	.009 13F .008 .012 13F	.016 .006 13F .006 .084 13F	.042 13F .032 .18 13F .17	.10 .15 13F .15 .089 13L .084 03L	.13 13L .21 13L .20 03L .23 13L	.23 03L .24 03L .24 03L .23 03L .23 13L	.16 131 .16 031 .097 131 .094 031 .17 131	.16 03L .042 13F .054 .026 13L
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.19 .17 .18 .008	.034 .015 .014 .087	.038 .030 .18 .18	.10 .16 .091	.13	# # # 4 4	.20 .12 .15	.18
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 24 . 27 . 95 . 80	.048 .024 .024 .11	.066 .057 .20 .23	.12	.14 .22 .22 .21	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.23 .25 .16 .18	.20 .23 .23 .080
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	23 05 79 0530 23 05 79 0605 05 06 79 1130 05 06 79 1155 19 06 79 0920	19 06 79 0940 05 07 79 1110 05 07 79 1130 18 07 79 0920 18 07 79 0935	31 07 79 1400 31 07 79 1415 18 09 79 1155 18 09 79 1200 02 10 79 1125	02 10 79 1130 18 10 79 0725 18 10 79 0730 06 11 79 1225 06 11 79 1230	27 11 79 0755 27 11 79 0800 18 12 79 0830 18 12 79 0835 15 01 80 0910	15 01 80 0915 05 02 80 0840 05 02 80 0845 26 02 80 0810 26 02 80 0815	18 03 80 1145 18 03 80 1150 01 04 80 0815 01 04 80 0820 15 04 80 0825	15 04 80 0830 29 04 80 1155 29 04 80 1200 13 05 80 1155

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS LONG. 112D 37M 24S PR 3 UTM 12 383300E 5523900N BELOW LETHBRIDGE (BELOW PICTURE BUTTE) STATION 00AT05AD2050 LAT. 49D 51M 30S OLDMAN RIVER AT HIGHWAY #845,

07506L NITROGEN TOTAL AMMONIA N	1. 11		7 77	<u> </u>		5555	55555	L. 1 8. 9.
07110F NITROGEN DISSOLVED NO3 & NO2 N	.02 10L .20 19L .22 10L .06 10L		0.0111100	.07	.16 .04 .05 .03	.10 .42 L.01	L.01 L.01 .03	. 19 . 18 . 18 . 18
07661F NITROGEN DISSOLVED N MG/L	.16 51L .43 61L .40 51L .18 61L .12	.13 .21 .19 .19	. 28 . 23 . 22 . 18	. 17 . 24 . 33 . 38		. 22 . 25 	11.00	.38
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.006 56L L.003 56L L.003 56L L.003 56L	.040 .052 .026 .12	.093 .021 .028 .026	.007 .011 .022 .038	.010 .067 .070 .068		.042 .075 .062 .13	.13
15356F PHOSPHORUS DISSOLVED INORG, PO4 P MG/L	.019 56L L.003 56L .006 56L	.046 .063 .037 .13	.095 .040 .049 .050	. 012 . 022 . 054 . 066	.028 .070 .0870	.015 L.003 L.003 L.003	.070	.13
15103F PHOSPHORUS DISSOLVED P MG/L	.026 03L .004 13L .003 03L .011 03L	.052 .074 .043 .14	.098 .048 .052 .053	.019 .026 .069 .060	. 035 . 070 . 095 . 094	.015 .009 .004 .029	.057 .087 .074	.15
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.077 3.1 .076 L.003	.067 .088 .062 .15	.12 .056 .065	.024 .034 .16 .091	.11 .089 .11 .096	.13 .41 .35 .013	.072 .10 .084 .13	.15
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	3.4 3.6 0.076	.070 .098 .070 .18	.13 .076 .069 .071	. 043 . 045 . 19 . 094	.12 .090 .12 .12	.15 .46 .41 .022	.087 .10 .088 .15	.16
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	13 05 80 1200 27 05 80 1125 27 05 80 1130 10 06 80 1130 24 06 80 1130	08 07 80 1230 22 07 80 1145 06 08 80 1145 19 08 80 1030 03 09 80 1100	16 09 80 1045 30 09 80 1430 15 10 80 1045 15 10 80 1050 30 10 80 1130	11 11 80 1435 25 11 80 1200 16 12 80 1420 13 01 81 1149 03 02 81 1245	22 02 81 1600 15 03 81 1230 02 04 81 1200 14 04 81 0300 28 04 81 1200	12 05 81 1145 26 05 81 1400 16 06 81 1100 13 07 81 1155 28 07 81 1400	18 08 81 1300 09 09 81 1015 29 09 81 1230 20 10 81 1400 11 11 81 0800	30 11 81 1000 14 12 81 1430 09 01 82 1430 10 02 82 0900

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

LONG. 112D 37M 24S PR 3 UTM 12 383300E 5523900N BELOW LETHBRIDGE (BELOW PICTURE BUTTE) STATION 00AT05AD2050 LAT. 49D 51M 30S OLDMAN RIVER AT HIGHWAY #845,

07506L NITROGEN TOTAL AMMONIA N MG/L							
07110F NITROGEN DISSOLVED NO3 & NO2 N	.45 .31 .14 .03	06104F CARBON DISSOLVED ORGANIC C					
07661F NITROGEN DISSOLVED N	.63 .48 .48 .22	06902F CARBON ORGANIC PARTICULATE C					
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.12 .10 .098 .051	07902F NITROGEN PARTICUL. N	.52 .61 1.56 1.1	.03	90.	.06 .07 02L	.07 02L
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.13 .10 .012 .062 .037	10501L RESIDUE FIXED NONFILTR.	282. 1340. 1570. 25.		14.4 4.3 LI.	งหญิงจำ	4::::
15103F PHOSPHORUS DISSOLVED P MG/L	.14 .11 .076 .050	10401L RESIDUE NONFILTR. MG/L	306. 286. 1420. 1650. 26.		17.6 7.0 11.	8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	·iii
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.11 .12 .039	02073L TURBIDITY JTU	125. 105. 195. 200.	28. 4.1	44440 4440	00000 00000	8 4 H &
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.15	02061S TEMPERATURE OF WATER DEG.C.	13. 13. 16.	. 25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	22. 22. 17.	11. 7.7. 8.8.	0000
SUBM	0426 0426 0426 0426 0426	SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	23 02 82 1400 23 03 82 0800 23 03 82 1000 03 04 82 1120 27 04 82 1250	SAMPLE DATE MST D M Y HR	23 05 79 0530 23 05 79 0605 05 06 79 1130 05 06 79 1155 19 06 79 0920	19 06 79 0940 05 07 79 1110 05 07 79 1130 18 07 79 0920 18 07 79 0935	31 07 79 1400 31 07 79 1415 18 09 79 1155 18 09 79 1200 02 10 79 1125	02 10 79 1130 18 10 79 0725 18 10 79 0730 06 11 79 1225 06 11 79 1230	27 11 79 0755 27 11 79 0800 18 12 79 0830 18 12 79 0835

NAQUADAT DETAILED REPORT
PARTICULATES TEMP DOC

LONG, 112D 37M 24S PR 3 UTM 12 383300E 5523900N BELOW LETHBRIDGE (BELOW PICTURE BUTTE) STATION 00AT05AD2050 LAT. 49D 51M 30S OLDMAN RIVER AT HIGHWAY #845,

06104F CARBON DISSOLVED ORGANIC C MG/L	3.06L 3.06L 2.06L 1.06L	2. 06L 4. 06L 3. 06L 4. 04L 4. 04L 4. 06L	3. 06F 3.	2. 04L 2. 04L 2. 04L 2. 04L	. ถ่. ค. ถ่. ถ่	พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ.พ		
06902F CARBON ORGANIC PARTICULATE C MG/L	.26 02L	.50 02L 1.1 02L 1.0 02L	3.1 1.9 02L	15.8 02L .82 02L .87	.43 .71 .56 .63	.66 .52 .31	44. 44. 52. 52.	2.1 .54 1.3
07902F NITROGEN PARTICUL. N MG/L	.04 02L	.10 02L .24 02L .21 02L .13 02L	.33	1.8 02L .12 02L .10		.13		.12
10501L RESIDUE FIXED NONFILTR.	, F. F. F. F.	10. 10. 16. 22. 12.	149.	5198. 5198. 5985. 25.0	0 · · · · · · · · · · · · · · · · · · ·	6. 6. L1. 2. 15.	6. 110. 21. 5.	88.
10401L RESIDUE NONFILTR.		7. 12. 14. 18. 14. 14.	163. 164. 59.	57. 5435. 6244. 105.	6.0 11. 7. 4.	8 3	8. 120. 24. 7.	4.9.6
02073L TURBIDITY JTU	3.1.7.9.3.3.3.3	2.5 18.0 24.0 14.0 9.8 1.9	32.0 26.0 21.0	24.0 2100. 1950. 40.0	8 8 5 5 5 F	3.5 5.4 3.4 2.8	4.4 4.6 38. 14.	50.0 2.5 4.5 2.2
02061S TEMPERATURE OF WATER DEG.C.		0. 0. 0. 61F 7. 61F 7. 61F	15. 61F	11. 61F 11. 61F 19. 61F	17.0 61F 17.0 61F 15. 61F	12. 61F 17. 61F 8. 61F 8. 61F 6. 61F	2. 61F 0. 61F	7.0 61F B.0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	15 01 80 0910 15 01 80 0915 05 02 80 0840 05 02 80 0845 26 02 80 0810	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29 04 80 1155 29 04 80 1200 13 05 80 1155	13 05 80 1200 27 05 80 1125 27 05 80 1130 10 06 80 1130 24 06 80 1130	08 07 80 1230 22 07 80 1145 06 08 80 1145 19 08 80 1030 03 09 80 1100	16 09 80 1045 30 09 80 1430 15 10 80 1045 15 10 80 1050 30 10 80 1130	11 11 80 1435 25 11 80 1200 16 12 80 1420 13 01 81 1140 03 02 81 1245	22 02 81 1600 15 03 81 1230 02 04 81 1200 14 04 81 0300

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STA

	06104F CARBON DISSOLVED ORGANIC C	mm4.ov	ที่ณ์ที่ณ์ที่	ને મેં હો મેં હો	พุพุจุพุจุ
N006	06902F CARBON ORGANIC PARTICULATE C	1.4 2.6 7.0 7.4 .37	. 388 . 277 . 274	.47 .25 .12 .36	.53 .49 80
UTM 12 383300E 5523900N FURE BUTTE)	07902F NITROGEN PARTICUL. N	25. 12. 18. 18. 18. 18.	.10 .08 .07	0.05	.05 .10 .09 .16
PR 3 UTM 13	10501L RESIDUE FIXED NONFILTR.	94. 248. 1080. 658. 18.	3 m 0 m 0		1. 6. 10.
LONG. 112D 37M 245 PR 3 UTM 12 363 BELOW LETHBRIDGE (BELOW PICTURE BUTTE)	10401L RESIDUE NONFILTR.	101. 265. 1120. 718. 21.	27. 4 6. 6 6.	,	2. 7. 12. 29.
SIM 30S LONG. BELOW	02073L TURBIDITY	3 87. 3 87. 3 05.	23. 0.1. 0.5. 0.5. 0.5.	0.00 2.00 3.00 6.00	22.50
LAT. 49D #845,	02061S TEMPERATURE OF WATER	10.0 61F 11.0 61F 13.0 61F 12.0 61F	21.0 61F 23. 61F 18. 61F 10. 61F 7.0 61F	5. 61F .0 61F .0 61F .0 61F	.0 61F 5. 61F 5. 61F 3.0 61F 11.0 61F
ATION 00AT05AD2050 DMAN RIVER AT HIGHWAY	SAMPLE DATE SUBM	81 1200 0 81 1145 0 81 1400 0 81 1100 0	07 81 1400 0426 08 81 1300 0426 09 81 1015 0426 09 81 1230 0426 10 81 1400 0426	11 81 0800 0426 11 81 1000 0426 12 81 1430 0426 01 82 1430 0426 02 82 0900 0426	02 82 1400 0426 03 82 0800 0426 03 82 1000 0426 04 82 1120 0426 04 82 1250 0426

14105L SILICA REACTIVE SIO2	MG/L									
17206L CHLORIDE DISSOLVED CL	MG/L									
02041L SPECIFIC CONDUCT.	US/CM	293.	290.	270.	274.	278.	278.	348.	347.	423.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	MG/L	0.	0.	0.	0.	0.	0.	24.	27.	. 0
10106L ALKALINITY TOTAL CACO3	MG/L	108.	108.	100.	101.	117.	117.	120.	119.	128.
06152F CARBON DISSOLVED INORGANIC C	MG/L									
10301L PH	PH UNITS	8.1	8.1	8.0	8.0	8.3	8.3	8.5	8.5	8.5
SUBM	ΟI	0456	0456	0456	0426	0456	0426	0456	0456	0456
SAMPLE DATE MST	D M Y HR		05 79 0		05 06 79 1155	0 62 90	19 06 79 0940	05 07 79 1110	05 07 79 1130	18 07 79 0920

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

LONG. 112D 37M 24S PR 3 UTM 12 383300E 5523900N BELOW LETHBRIDGE (BELOW PICTURE BUTTE) STATION 00AT05AD2050 LAT. 49D 51M 30S OLDMAN RIVER AT HIGHWAY #845,

14105L SILICA REACTIVE SIO2 MG/L				8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	W 0 0 0 V	44w www.vo.	w44mm 60m66	1.00.1
17206L CHLORIDE DISSOLVED CL MG/L					w w w w	440. 11.0.44 10.0.00		0 10 0 0 0 0 0 4
02041L SPECIFIC CONDUCT. US/CM	400. 357. 330. 487.	4889. 368. 363. 457.	462. 518. 514. 586.	557. 559. 541. 540. 532.	534. 456. 456. 326.	548. 576. 318. 325.	293. 349. 344. 275.	349. 389. 440.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	0.05	2.2. 4.6.00.	00000		•••••			6. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
10106L ALKALINITY TOTAL CACO3 MG/L	129. 88. 84. 140.	129. 130. 113. 112.	144. 148. 151. 180.	212. 212. 180. 177.	181. 115. 111. 120. 01L	160. 01L 160. 01L 120. 01L 120. 01L	115. 01L 117. 01L 115. 01L 111. 01L	127. 01L 131. 01L 118. 01L 140. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L				52. 53L 46. 52L 42. 53L 41. 52L 33. 52L	33. 53L 26. 53L 25. 52L 13. 53L 20. 52L	36. 53L 37. 52L 23. 53F 23. 53L	24. 52L 23. 53L 23. 52L 22. 52L	27.
10301L PH PH UNITS	00000 40000	ବ୍ଷ୍ଟ୍ର ବ୍ର ନ ମଧ୍ୟ ମଧ୍ୟ	88877 8886 8886 8886 8886 8886 8886 888	8.7.7.7 6.7.7.7 7.7.7	8.000.000	88778 846.88	00000 011100	8 8 8 8 6 7 8 6
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	18 07 79 0935 31 07 79 1400 31 07 79 1415 18 09 79 1155 18 09 79 1200	02 10 79 1125 02 10 79 1130 18 10 79 0725 18 10 79 0730 06 11 79 1225	06 11 79 1230 27 11 79 0755 27 11 79 0800 18 12 79 0830 18 12 79 0835	15 01 80 0910 15 01 80 0915 05 02 80 0840 05 02 80 0845 26 02 80 0810	26 02 80 0815 18 03 80 1145 18 03 80 1150 01 04 80 0815 01 04 80 0820	15 04 80 0825 15 04 80 0830 29 04 80 1155 29 04 80 1200 13 05 80 1155	13 05 80 1200 27 05 80 1125 27 05 80 1130 10 06 80 1130 24 06 80 1130	08 07 80 1230 22 07 80 1145 06 08 80 1145 19 08 80 1030

PAGE 15

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05AD2050 LAT. 49D 51M 30S LONG. 112D 37M 24S PR 3 UTM 12 383300E 5523900N OLDHAN RIVER AT HIGHWAY #345,

14105L SILICA REACTIVE SIO2 MG/L	က် <u>ထံ ထံ ယု</u> က	4 1 1 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0 K 4 6 V	44400 WH -		8 4 4 8 H
17206L CHLORIDE DISSOLVED CL MG/L	4 R W W W & S S S S S S S S S S S S S S S S S S S	w o o o o	wwanw anonn	6.0.1.1.2.4.8.2.2.4.2.2.4.2.2.2.2.2.2.2.2.2.2.2	6.9 10. 10. 12. 12.	4 N N N 4
02041L SPECIFIC CONDUCT. US/CM	410. 409. 343. 414.	355. 355. 363. 368. 368.	466. 389. 442. 511. 540.	307. 328. 280. 340. 315. 375. 420.	500. 399. 536. 512. 594.	424. 437. 446. 452. 397.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	R W H N 4 & 0 0	0.000	0.000.	0.000 × W 11 k	, 1 0 % 0 0 0	00000
10106L ALKALINITY TOTAL CACO3 MG/L	137. 01L 134. 01L 126. 01L 142. 01L	133. 01L 134. 01L 145. 01L 120. 01L 135. 01L	170. 01L 129. 01L 155. 01L 169. 01L 171. 01L	121. 011 133. 011 129. 011 126. 011 132. 011 154. 011 147. 011		150. 01L 155. 01L 155. 01L 155. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L	288. 290. 382.	35. 26.	43. 44. 46. 38.	27. 28. 30. 30. 42. 34.	33. 33. 467. 65. 67.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
10301L PH PH UNITS	8 8 8 8 8 8 8 8 8 8	00000 4400	88888	တွင်တိတ်တိတ် ထိတ်လိ	00 00 00 00 00 00 00 00 00 00 00 00 00	00000
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SAMPLE DATE HST D M Y HR	03 09 80 1100 16 09 80 1045 30 09 80 1430 15 10 80 1045 15 10 80 1050	30 10 80 1130 111 11 80 1435 25 11 80 1200 16 12 80 1420 13 01 81 1140	03 02 81 1245 22 02 81 1600 15 03 81 1230 02 04 81 1200 14 04 81 0300		10 81 1230 10 81 1400 11 81 0800 11 81 1000 12 81 1430 01 82 1430 02 82 0900	23 02 82 1400 (23 03 82 0800 (23 03 82 1000 (23 04 82 1120 (27 04 82 1250 (
	OHMHH	мнайн	00101	מהמהה מהסו	NO HEADE	00000

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 449950E 5522050N PR 3 2S LONG. 111D 41M 48S STATION 00AT05AG2095 LAT. 49D 51M OLDMAN RIVER AT THE MOUTH

07506L NITROGEN TOTAL AMMONIA N		::::::	=======================================	::::::	11,744	wiri wiri widd		L. 2. 2. 1. 1. 2. 2. 1. 1. 2. 2. 1. 1. 2. 2. 1. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.
07110F NITROGEN DISSOLVED NO3 & NO2 N	.08 19F .09 19F .08 .07 19F	.07 .01 19F .14 .02 19F	L.01 19F .04 .03 19F L.01 19F	1.01 1.01 1.01 .05 19L	.19 19L .20 10L .44 19L .46 10L	.70 10L .6 19L .66 19L .64 10L	.40 19L .28 10L .09 19L .09 10L	.01 10L .15 19F .23
07661F NITROGEN DISSOLVED N MG/L	.24 .23 51F .20 .20 51F	.16 51F .13 .35 51F .17	.19 .22 51F .25 51F	.22 51F .21 .20 51F .20 61L .22 51L	.41 61L .40 51L 1.0 61L 1.0 51L 1.1 61L	1.2 51L .80 61L .90 51L 1.1 61L 1.2 51L	.74 61L .78 51L .36 61L .33 51L	.27 51L .36 .49 51F .21 61L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 66F L.003 L.003 66F .006	L.003 L.003 66F L.003 66F L.003	L.003 66F L.003 .003 66F .008	L.003 .013 66F .013 .021 66L .022 56L	.022 66L .022 56L .059 66L .060 56L	.047 56L .079 56L .21 66L	.090 66L .035 56L .032 56L .037 66L	.060 56L .042 66F .030
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	L.003 46F L.003 46F .004 46F .008 46F	L.003 46F L.003 L.003 46F L.003	.003 46F L.003 .006 46F	L.003 .013 46F .014 .029 46L .024 56L	.030 46L .028 56L .061 46L .060 56L	.048 56L .076 46L .080 56L .21 46L	.10 46L .091 56L .045 46L .045 56L	.060 56L .045 46F .030
15103F PHOSPHORUS DISSOLVED P MG/L	.012 13F	.004 13F .005 .006 13F L.003	.013 13F .010 .012 13F .011	.009 .024 13F .018 .026 13L .025 03L	.030 13L .037 03L .071 13L .067 03L	.057 03L .088 13L .091 03L .22 13L .22 03L	.11 13L .11 03L .055 13L .049 03L	.073 03L .053 13F .052 .014 13L
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.13 .13 .27 .062	.068 .002 .010	.011 .016 .015 .009	.013 .039 .038 .030	. 044 . 037 . 067 . 065	.086 .086 .083	.12 .12 .065 .061	.087 .17 .18
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 23 . 46 . 27 . 065	0000 0000 0000 0000 0000 0000	.020 .019 .018 .019	.018 .055 .052 .035	.044 .045 .071 .074	m # 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.13 .14 .075 .077	.20 .27 .11
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	22 05 79 1615 22 05 79 1700 05 06 79 0840 05 06 79 0915 19 06 79 0715	19 06 79 0735 05 07 79 0830 05 07 79 0850 18 07 79 0700 18 07 79 0715	31 07 79 1105 31 07 79 1115 18 09 79 0910 18 09 79 0915 02 10 79 0825	02 10 79 0830 17 10 79 1600 17 10 79 1630 06 11 79 0955 06 11 79 1000	26 11 79 1525 26 11 79 1530 17 12 79 1425 17 12 79 1430 14 01 80 1530	14 01 80 1535 04 02 80 1610 04 02 80 1615 25 02 80 1705 25 02 80 1710	18 03 80 0825 18 03 80 0830 31 03 80 1715 31 04 80 1710	14 04 80 1715 29 04 80 0825 29 04 80 0830 13 05 80 0905

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS UTM 12 449950E 5522050N PR 3 STATION 00AT05AG2095 LAT. 49D 51M 2S LONG. 111D 41M 48S OLDMAN RIVER AT THE MOUTH

07506L NITROGEN TOTAL AMMONIA N	55555						11111	
07110F NITROGEN DISSOLVED NO3 & NO2 N	.06 10L .17 19F .17 .09 10L .07	.01 L.01 10L .01 L.01 L.01	L.01 L.01 L.01 10L L.01	L.01 L.01 .02 .12	. 10 	L.01 .19 .10 .17	10010	L.01 L.01 .01 L.01
07661F NITROGEN DISSOLVED N	.30 .31 51F .24 61L	.13 .21 61L .21 .33	.24 .18 .24 61L .48	113	95. 7. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.	.16 .12 .30 .55	11. 11. 11. 11. 11. 11. 11. 11.	.22 .24 .20 .14
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.006 56L .003 66F .003 56L L.003	.004 L.003 L.003 L.003	L.003 .003 .003 56L L.003	L.003 L.003 L.003	L.003 .004 .028 .028		L. 0003 L. 0003 L. 003	L.003 L.003 .015 L.003
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.009 56L .008 46F .009 56L .004 56L	.007 56L .003 L.003	.009 .004 .004 56L .004	. 003 L. 003 . 003	L.003 .012 .035 .040	. 021 L. 010 L. 003	L.003 . 005 L.003	L.003 .008 .024 .007
15103F PHOSPHORUS DISSOLVED P MG/L	.016 03L .008 13F .009 .012 03L	.010 .009 03L .004 L.003	.009 .009 .011 03L .011	.003	.003 .015 .040 .049	.037 .012 .013 .015	.010 .008 .006 .008	.010 .011 .025
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.095 1.0 .97 .092 L.003	.015 .013 .012 .011	.013 .010 .007 .014	.035 .021 .013 .013	. 063 . 083 . 083	112 133 131 142	. 019 . 017 . 023 . 015	.015 .014 .045
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 111 . 85 . 055 . 069	. 021 . 022 . 012 . 011	.023 .015 .026	.035 .030 .019 .018	.010 .073 .070 .095	.14 .27 .35 .31	.020 .029 .027 .019	.024 .024 .054
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE NST D M Y HR	13 05 80 0910 27 05 80 0740 27 05 80 0745 10 06 80 0830 24 06 80 0915	08 07 80 0830 15 07 80 1325 22 07 80 0855 22 07 80 0900 06 08 80 0930	19 08 80 0820 03 09 80 0900 08 09 80 1519 16 09 80 0830 30 09 80 0830	15 10 80 0830 30 10 80 0930 11 11 80 1045 25 11 80 0930 13 01 81 0900	03 02 81 1030 22 02 81 1200 15 03 81 1020 02 04 81 0930 14 04 81 1015	28 04 81 0830 12 05 81 0830 26 05 81 0930 15 06 81 1815 15 06 81 1820	07 07 81 0715 21 07 81 1700 28 07 81 1030 18 08 81 1030 01 09 81 0645	09 09 81 0800 29 09 81 1010 20 10 81 1210 10 11 81 1530

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

STATION 00AT05AG2095 LAT. 490 51M 2S LONG. 111D 41M 46S PR 3 UTM 12 449950E 5522050N OLDMAN RIVER AT THE MOUTH

07506L NITROGEN TOTAL AHMONIA N		
07110F NITROGEN DISSOLVED NO3 & NO2 N	.39	.28 L.01 L.01
07661F NITROGEN DISSOLVED N MG/L		. 32
15256F PHOSPHORUS DISSOLVED ORTHO PO¢ P MG/L	.003 .028 .007 .28	.071
15356F PHOSPHORUS DISSOLVED INORG, PO4 P	.004 .033 .011 .29 .18	.079 .026 .021
15103F PHOSPHORUS DISSOLVED P MG/L	.010 .033 .019 .29	.086
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.010 .035 .033 .30	.087
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.021 .038 .050 .32	.10
SUBM	0426 0426 0426 0426 0426	0426 0426 0426
SAMPLE DATE MST D M Y HR	30 11 81 1245 14 12 81 1600 09 01 82 1400 09 02 82 1400 23 02 82 1140	22 03 82 1630 03 04 82 1340 27 04 82 1100

06104F CARBON DISSOLVED ORGANIC C					
06902F CARBON ORGANIC PARTICULATE C MG/L					
07902F NITROGEN PARTICUL. N	.53 1.1 1.2 07	80.09	. 0 9	.33	.10 02L
10501L RESIDUE FIXED NONFILTR.	278. 266. 587. 408. 73.	70.	:: ::	ท <i>ี</i> คื ซ์ ทั ทั	.11.
10401L RESIDUE NONFILTR. MG/L	298. 294. 623. 439. 75.	73. 12. 12. 6.	LI. 4.6 13.	100.04	.2
02073L TURBIDITY JTU	130. 125. 125. 125. 59.	56. 4.4	งงงงง จังหัช จั	w w w 4 v	1.5
02061S TEMPERATURE OF WATER DEG.C.	16. 16. 16. 16.	16.5 19.5 19.5 21.	23.5 23.5 14.	100.00.00.00.00.00.00.00.00.00.00.00.00.	0.
SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	22 05 79 1615 22 05 79 1700 05 06 79 0840 05 06 79 0915 19 06 79 0715		31 07 79 1105 31 07 79 1115 18 09 79 0910 18 09 79 0915 02 10 79 0825	02 10 79 0830 17 10 79 1600 17 10 79 1630 06 11 79 0955 06 11 79 1000	26 11 79 1525

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 3 UTM 12 449950E 5522050N 2S LONG. 111D 41M 48S STATION 00AT05AG2095 LAT. 49D 51M OLDMAN RIVER AT THE MOUTH

06104F CARBON DISSOLVED ORGANIC C MG/L	3.06L 3.06L	2. 06L 2. 04L 3. 06L	3. 04L 3. 04L 4. 04L 3. 04L 3. 04L	3. 06F 4. 2. 06L 2. 04L 2. 06F	2. 04L 2. 2.	พ่พ่ง พ่พ่	ชนน 140	
06902F CARBON ORGANIC PARTICULATE C MG/L	.25 02L	.19 02L .19 02L .41 02L	.37 02L .87 02L	8. 7. 8	.95 02L 1.3 .44 .34 02L	5. 83. 84. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	.36 02L .63 .91 .39	.41 .46 .34
07902F NITROGEN PARTICUL. N MG/L	.06 02L	.04 02L .04 02L	.09 02L	.50	.18 02L .16 .06 .07 02L	.13 .14 .08	.06 02L .12 .15 .11	.07 .10 .05
10501L RESIDUE FIXED NONFILTR. MG/L	11001	ittit	નં વે વે તે વે	92. 104. 95.	966. 111. 63.0 5.0	ં ભં ં ભં ં	Li. 6. 16.	7. 4. 12. L1.
10401L RESIDUE NONFILTR.	:°°:	dddd	મે વેવેમેવે	103. 108. 103. 989.	1022. 122. 71.0 6.0	,,,,,,	2. 11. 6.	8. 6. 14.
02073L TURBIDITY JTU	₩ ₩ ₩ ₩		4.00 LL 4.1.0 E.S.	32.0 27.0 35.0 46.0 460.	440. 49.0 30. 4.5	8 8 7 8 8 8 8 1 4 4	4.5 6.8 10.	พ. ၃. ๑. พ. ราชาพิ รา
02061S TEMPERATURE OF WATER DEG.C.	•		0. 0. 61F 7. 61F 7. 61F	16. 61F 16. 61F 13. 61F	13. 61F 17. 61F 17. 61F 20.5 61F	24.0 61F 24.0 61F 16.0 61F 17.0 61F 14. 61F	18.2 61F 11.5 61F 17. 61F 9. 61F 5. 61F	0. 61F .0 61F 0. 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	26 11 79 1530 17 12 79 1425 17 12 79 1430 14 01 80 1535 14 01 80 1535	04 02 80 1610 04 02 80 1615 25 02 80 1705 25 02 80 1710 18 03 80 0825	18 03 80 0830 31 03 80 1715 31 03 80 1720 14 04 80 1710 14 04 80 1715	29 04 80 0825 29 04 80 0830 13 05 80 0905 13 05 80 0910 27 05 80 0740	27 05 80 0745 10 06 80 0830 24 06 80 0915 08 07 80 0830 15 07 80 1325	22 07 80 0855 22 07 80 0900 06 08 80 0930 19 08 80 0820 03 09 80 0900	08 09 80 1510 16 09 80 0830 30 09 80 0830 15 10 80 0830 30 10 80 0930	11 11 80 1045 25 11 80 0930 13 01 81 0900 03 02 81 1030

UTM 12 449950E 5522050N PR 3 STATION 00AT05AG2095 LAT. 49D 51M 2S LONG. 111D 41M 48S OLDMAN RIVER AT THE MOUTH

06104F CARBON DISSOLVED ORGANIC C	HG/L	<i>i</i> 1	ก๋ฑ์	m	4.	ri ·	4.	'n	'n	۲,	2.	'n.	m.	м,	'n	m.	'n	. 4	4.	'n	īŲ	'n	. 4	.4	ϡ	.4
06902F CARBON ORGANIC PARTICULATE C	MG/L	1.2	0 89.	.68	1.2	4.4	5.0	4.9	3.0	. 25	55.	99.	.33		.57	14.	99.	.52	.11	.20	.72	.25		.50	96.	2.3
07902F NITROGEN PARTICUL. N	MG/L	.29	.16	.18	.22	.52	. 55	.62	.42	90.	.08	.11	.08		11.	.10	.14	60.	, 04	.04	.14	50°	.07	60.	.19	.43
10501L RESIDUE FIXED NONFILTR.	MG/L	33.	ໝໍ່ ໜໍ່	7.	101.	470.	1192.	1264.	1232.	12.		20.	2.	'n	'n	1.	ø	. 9	7.	3.0	.11	۲,	1.	::	ij	31.
10401L RESIDUE NONFILTR.	MG/L	36.	10. 9.	6	115.	510.	1236.	1334.	1308.	15.	15.	23.	4.	'n.	5.	'n.	10.	œ •	1.	4.0	1.	w.	2.	ri,		37.
02073L TURBIDITY	55	18.0	4. 4. 6. 10.	5.1	36.	209.	320.	270.	270.		15.	25.	5.9		1.9	8.4	8.7	6.5	2.4	2.0	1.1	1.6	2.8	2.5	3.0	16.
02061S TEMPERATURE OF WATER	DEG.C.		5.0 61F	4.0 61F	12.0 61F	9.0 61F	13.0 61F	13.0 61F	13.0 61F	20.0 61F			22. 61F			8. 61H	5.0 61F		.0 61F	.0 61F	.0 61F	.0 61F	.0 61F	4. 61F	3.0 61F	10.0 61F
	a	9250	0426	0426	0456	0426	0456	0456	0456	0456	0426	0456	0426	0426	0456	0426	0426	0426	0426	0426	0426	0426	0456	0426	0456	9250
SAMPLE DATE	D M Y HR	02	15 03 81 1020 02 04 81 0930	04 81	04 81	05 81	26 05 81 0930	06 81	90	07 81	07	07 81	18 08 81 1030	18 60	09 81	09 81	10 81	10 11 81 1530	11 81	12 81	01 82	02 82	02 82	22 03 82 1630	04 82	27 04 82 1100

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 449950E 5522050N STATION 00ATOSAG2095 LAT. 49D 51M 2S LONG. 111D 41M 48S PR 3 OLDHAN RIVER AT THE MOUTH

14105L SILICA REACTIVE SIO2 MG/L					ผู	ት ኮ ሪኒ ታ ዕ	99 1000 1000	, www , , , , , ,
17206L CHLORIDE DISSOLVED CL MG/L							440	6.4 1.5 1.5
02041L SPECIFIC CONDUCT. US/CM	297. 299. 296. 296.	298. 396. 396. 412. 421.	429. 414. 510. 507.	514. 418. 422. 528.	571. 549. 685. 684. 560.	561. 590. 589. 577.	530. 529. 353. 353. 572.	574. 350. 412. 312.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000	°. °.	M 11. w	8.1.000	00000		w M Q	0. 0.
10106L ALKALINITY TOTAL CACO3 MG/L	110. 110. 110. 109.	117. 123. 124. 117.	109. 107. 126. 123.	121. 117. 117. 152.	151. 156. 208. 209. 224.	220. 192. 197. 195.	135. 132. 110. 01L 110. 01L	160. 01L 130. 01L 130. 01L 108. 01L
06152F CARBON DISSOLVED INORGANIC C					52. 53L	47. 52L 45. 52L 35. 53L 36. 52L	31. 53L 31. 52L 17. 53L 18. 52L 34. 53L	37. 52L 24. 53F 24. 53L 22. 53L
10301L PH PH UNITS		00000	0 0 0 0 7 7 9 9 9	0 0 0 0 0 4 7 1 1 1 1 1 1	7.60.00	8.7.7.7.7.9.9.7.7.9.9.7.7.7.9.9.7.7.7.9.9.7.7.7.9.9.7.7.9.9.7.7.9	6.00 6.00 6.00 7.00	8.7 7.9 7.9 7.8
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	22 05 79 1615 22 05 79 1700 05 06 79 0840 05 06 79 0915 19 06 79 0715	19 06 79 0735 05 07 79 0830 05 07 79 0850 18 07 79 0700 18 07 79 0715	31 07 79 1105 31 07 79 1115 18 09 79 0910 18 09 79 0915 02 10 79 0825	02 10 79 0830 17 10 79 1600 17 10 79 1630 06 11 79 0955 06 11 79 1000	26 11 79 1525 26 11 79 1530 17 12 79 1425 17 12 79 1430 14 01 80 1530	14 01 80 1535 04 02 80 1610 04 02 80 1615 25 02 80 1705 25 02 80 1710	18 03 80 0825 18 03 80 0830 31 03 80 1715 31 03 80 1720 14 04 80 1710	14 04 80 1715 29 04 80 0825 29 04 80 0830 13 05 80 0905

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION OOATOSAG2095 LAT. 49D 51M 2S LONG. 111D 41M 48S PR 3 UTM 12 449950E 5522050N OLDMAN RIVER AT THE MOUTH

14105L SILICA REACTIVE SIO2 MG/L	844 W W W W W W W W W W W W W W W W W W	1.07.7.7.88.1.	વે જં જાં જાં	1 . k 5 77 4 7 80	99 91449	W 4 W 4 4	8 9 12 9 9	2.90.1
17206L CHLORIDE DISSOLVED CL MG/L	4.0 E. U. 4.	10.5.4.3	0.444 0.833 0.833	νωωφο γ.φούσου γ.φούσου	4 K G K G K G K G K G K G K G K G K G K	1.33	1 K K K K 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0.000
02041L SPECIFIC CONDUCT. US/CM	297. 295. 306. 286.	382. 412. 420. 478.	449. 427. 426. 429.	434. 415. 367. 432. 383.	494. 375. 491. 568. 544.	39.00 30.00 30.00 30.00 30.00	308. 286. 396. 382. 420.	434. 496. 525. 407.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L		2 6 6 8 8 1 1 1 1 5 5 5 8 8 1 1 1 1 1 1 1 1 1	8.6 7.0 0.0	W W Y		0.0.0.0	ын <u>п</u> Филоо	, i i i i
10106L ALKALINITY TOTAL CACO3 MG/L	115. 01L 107. 01L 105. 01L 118. 01L	126. 01L 124. 01L 117. 01L 117. 01L 129. 01L	112. 01L 114. 01L 115. 01L 129. 01L	137. 01L 143. 01L 132. 01L 148. 01L 145. 01L	167. 01L 122. 01L 164. 01L 170. 01L 176. 01L	152. 011 134. 011 121. 011 118. 011	126. 01L 140. 01L 140. 01L 124. 01L 125. 01L	126. 01L 140. 01L 151. 01L 144. 01L
06152F CAREON DISSOLVED INGREANIC C	23, 52L 22, 53F 22, 52L 22, 52L	27. 26. 52L 25. 25. 25.	24. 24. 24. 52L 29. 32.	31. 35.	43. 46. 38.	34. 28. 29. 55.	31. 33. 38. 29.	24.
10301L PH PH UNITS	88888	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ఇది ఇది ఇ చిచి మె 4 బ	ໝ່ອນດຸໝຸສ ឃុំ4.ໜ້ພ່∽່	888888 01868	88888 8.22.22	00 B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	80 80 80 60 70 40 70
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	13 05 80 0910 27 05 80 0740 27 05 80 0745 10 06 80 0830 24 06 80 0915	08 07 80 0830 15 07 80 1325 22 07 80 0855 22 07 80 0900 06 08 80 0930	19 08 80 0820 03 09 80 0900 08 09 80 1510 16 09 80 0830 30 09 80 0830	15 10 80 0830 30 10 80 0930 11 11 80 1045 25 11 80 0930 13 01 81 0900	03 02 81 1030 22 02 81 1200 15 03 81 1020 02 04 81 0930 14 04 81 1015	28 04 81 0830 12 05 81 0630 26 05 81 0930 15 06 81 1815 15 06 81 1820	07 07 81 0715 21 07 81 1700 28 07 81 1030 18 08 81 1030 01 09 81 0645	09 09 81 0800 29 09 81 1010 20 10 81 1210 10 11 81 1530

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

PR 3 UTM 12 449950E 5522050N STATION 00AT05AG2095 LAT. 49D 51M 2S LONG. 111D 41M 48S OLDHAN RIVER AT THE MOUTH

14105L SILICA REACTIVE SIO2 MG/L	166.0	9.1 4.1 1.
17206L CHLORIDE DISSOLVED CL MG/L	5.6 12. 7.5 8.7	5.7.2
02041L SPECIFIC CONDUCT. US/CM	556. 553. 702. 527. 424.	448. 494. 482.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	~ • • • • •	0.00.1
10106L ALKALINITY TOTAL CACO3	185. 01L 202. 01L 269. 01L 205. 01L 160. 01L	145. 01L 155. 01L 160. 01L
DISIONI	46. 61. 533.	36. 38.
10301L PH PH UNITS	00 / / 0 4 / 4 / 0	8.0 7.6 8.4
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426
SAMPLE DATE MST D M Y HR	30 11 81 1245 14 12 81 1600 09 01 82 1400 09 02 82 1400 23 02 82 1140	22 03 82 1630 03 04 82 1340 27 04 82 1100

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS STATION 00AT05AK2070 LAT. 49D 54M 15S LONG. 111D 31M 42S PR 3 UTM 12 462050E 5527900N SOUTH SASKATCHEWAN RIVER

07506L NITROGEN TOTAL AMMONIA N	:::::	::::::			֖֖֖֖֖֡֞֞֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	44400	<u> </u>	m. 0. 0.
07110F NITROGEN DISSOLVED NO3 & NO2 N	.09 19F .05 19F .05 19F	.30 .10 19F .11 L.01 19F	.03 19F .02 19F .01	L.01 L.01 L.01 L.01 .01	.36 19F .39 1.3 19L 1.3 10L 1.7 19L	1.65 10L 1.4 19L 1.4 19L 1.4 19L	1.3 19L 1.1 19L 1.4 10L 1.1 19L	1.1 10L .70 19L .74 10L 1.4 19F
07661F NITROGEN DISSOLVED N	.31 .28 51F .19 .19 51F	.50 51F .29 51F .26 51F	.28 .40 51F .32 .28 51F	.45 51F .25 .25 51F .31 51F	.62 .66 51F 1.5 61L 1.7 51L 3.1 61L	3.0 51L 1.8 61L 1.6 51L 1.6 61L	1.5 61L 1.5 51L 1.6 61L 1.9 51L	1.6 51L 1.6 61L 1.3 51L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.013 66F .013 .008 66F .006	.036 .010 66F .012 .029 66F	.006 66F .012 .003 66F L.003	L.003 L.003 66F L.003 .003 66F	L.003 66F L.003 .052 66L .052 56L .15 66L	.14 56L .12 66L .12 56L .14 66L	.11 66L .11 56L .16 66L .18 56L .15 66L	.15 56L .028 66L .028 56L .075 66F
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.017 46F .014 .01 46F .016	.036 .016 46F .016 .036 46F	.010 46F .014 .008 46F .009	.007 .006 46F L.003 .006 46F	.005 46F .005 .054 46L .055 56L .15 46L	.14 561 .13 461 .13 561 .14 461 .15 561	.11 46L .12 56L .17 46L .18 56L .15 46L	.15 56L .033 46L .029 56L .087 46F
15103F PHOSPHORUS DISSOLVED P MG/L	.12 13F .022 .021 13F .016	.048 .024 13F .024 .039 13F	.023 13F .022 .014 13F .017	.029 .016 13F .010 .020 13F	.011 13F .010 .065 13L .066 03L .16 13L	.16 03L .13 13L .14 03L .15 13L .15 03L	.12 13L .12 03L .18 13L .19 03L .16 13L	.16 03L .043 13L .045 03L
15301L PHOSPHORUS TOTAL INREANIC P MG/L	.084 .113 .15 .16	.11 .050 .020 .048	.011 .012 .016 .011	.011 .007 .008 .021	.009	.16 .13 .15	.11	.16 .33 .28 .31
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	112 118 118 15	.14 .077 .061 .070	.023 .032 .028 .025	.030 .023 .021 .036	.015 .014 .092 .11	.19 .15 .15 .17	.14	.37 .39 .36
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	15 05 79 1820 15 05 79 1855 29 05 79 1430 29 05 79 1431 12 06 79 1420	12 06 79 1500 26 06 79 1245 26 06 79 1300 10 07 79 1150 10 07 79 1215	24 07 79 1225 24 07 79 1235 06 08 79 1300 06 08 79 1305 21 08 79 1425	21 08 79 1435 25 09 79 0740 25 09 79 0745 10 10 79 0655 10 10 79 0700	30 10 79 0755 30 10 79 0800 19 11 79 1525 19 11 79 1530 10 12 79 1540	10 12 79 1545 08 01 80 1415 08 01 80 1420 29 01 80 1340 29 01 80 1345	19 02 80 1315 19 02 80 1320 11 03 80 1325 11 03 80 1330 25 03 80 1135	25 03 80 1140 09 04 80 1345 09 04 80 1350 22 04 80 1525

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS UTH 12 462050E 5527900N STATION 00AT05AK2070 LAT. 49D 54H 15S LONG. 111D 31M 42S PR 3 SOUTH SASKATCHEWAN RIVER

07506L NITROGEN TOTAL AMMONIA N MG/L	L.1 L.1 L.1			:::::	i i oʻ 4 ivʻ i	12.5.11	2.1.1.1	11112.
07110F NITROGEN DISSOLVED NO3 & NO2 N	1.1 .16 19F .16 .04 19F L.01	.36 10L .58 .40 .18 L.01 10L	L.01 L.01 L.01 L.01 L.01	L.01 L.01 L.01 . 94		1.0 .80 .90 .46		L.01 L.01 .01
D7661F NITROGEN DISSOLVED N	1.9 51F .32 .30 51F .33 51F	.53 61L .66 .50 .29	.26 .35 .21 .21 .27 61L	. 23 . 25 1.2 95	1 12.	1.1 1.0 1.2 .72	.80 .13 .42	.19
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.033 66F .033 66F .030 .005 66F	.027 56L .030 .025 L.003 56L	L.003 L.003 L.003 L.003 56L	L.003 L.003 L.003 .016	.078 .12 .10 .080	.1107	. 019 L. 003 L. 003	L.003 L.003 L.003
15356F PHOSPHORUS DISSOLVED INORG, PO4 P MG/L	.033 46F .033 46F .023 .012 46F	.021 56L .037 .030 L.003	.005 L.003 L.003 L.003 56L	. 004 L.003 L.003 . 018	.081 .13 .10 .096	.11 .07 .11 .068		L.003 .003 L.003
15103F PHOSPHORUS DISSOLVED P MG/L	.10 .15 13F .12 .026 13F	.032 03L .037 .035 .018	.009 .015 .012 .007	.012	.087 	.11 .08 .11 .083	.026 .033 .003 .019	.010
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	. 036	.21 .13 .16 L.003	.003 .009 .007 .016	.009 .014 .012 .14	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	.15 .11 .090 .089	.13 .011 .049	.012 .023 .023 .091
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.36 .15 .072	.25 .17 .18 .057	.019 .018 .020 .028	.020 .020 .019 .16	122 133 156 16	21. 20. 20. 20. 20. 20. 20. 20. 20. 20. 20	.13 .15 .017 .057	.021 .035 .037 .10
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	22 04 80 1530 06 05 80 1320 06 05 80 1325 22 05 80 1110 22 05 80 1115	04 06 80 1100 18 06 80 0755 18 06 80 0800 02 07 80 1545 16 07 80 0635	16 07 80 0820 30 07 80 0830 13 08 80 0730 26 08 80 1630 09 09 80 0830	09 09 80 1510 23 09 80 1410 07 10 80 1410 22 10 80 0810 05 11 80 0930	19 11 80 0820 10 12 80 0900 07 01 81 0800 28 01 81 0900 17 02 81 1600	10 03 81 1500 22 03 81 0830 07 04 81 1700 22 04 81 1415 05 05 81 1345	20 05 81 1445 15 06 81 1630 08 07 81 0710 27 07 81 1530 02 09 81 0725	08 09 81 1530 20 10 81 1100 20 10 81 1105 30 11 81 1400

GE 30

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 462050E 5527900N PR 3 AT HIGHWAY #879 LAT. 490 54M 15S LONG. 111D 31M 42S STATION 00AT05AK2070 I SOUTH SASKATCHEWAN RIVER

NITROGEN TOTAL AMMONIA MG/L ه بن م DISSOLVED NO3 & NO2 NITROGEN DISSOLVED CARBON 07110F 06104F ORGANIC MG/L MG/L 1.7 NITROGEN DISSOLVED PARTICULATE 07661F 06902F MG/L 2.1 CARBON DRGANIC 06 02L .09 02L PHOSPHORUS DISSOLVED ORTHO PO4 PARTICUL. NITROGEN 07902F MG/L .13 .18 .10 HG/L .43 03 0.7 60 .17 11 ۵. 17 z PHOSPHORUS DISSOLVED INORG. PO4 RESIDUE JONF I LTR FIXED 15356F 10501L MG/L MG/L .17 191. 255 112. 31. 9 2 7 41.12 140. 90 PHOSPHORUS RESIDUE JONFILTR 10401L 15103F MG/L ٩ .18 208. 47. 116. 13. 4. 4 12 4 12. 3.11.5. 38. 151. 128. PHOSPHORUS INORGANIC TURBIDITY TOTAL 02073L 4.0 43. 7.7 12. 3.7 4.0 MG/L 23.7 21.12 20 21 21 66. 76. 79. 2 PHOSPHOROUS PHOSFHATE TEMPERATURE 020615 21.5 TOTAL DEG.C. 16. 23.5 23.5 24.5 24.5 24.5 12. 12. 10. MG/L 17. .20 17. 16. m m 01 01 0 MATER 0426 1100 1820 1245 1150 1225 1300 1305 0745 0655 0800 1525 1540 1300 1445 1300 1435 0740 0755 79 1545 SAMPLE DATE SAMPLE DATE 1430 1431 1420 1500 MST 828 730 22022 730 79 79 79 79 >-> Σ Σ 10 12 02 0.7 01 90 90 07 03 23 115 29 29 12 30 26 26 26 10 25 25 10 10 ۵ 24 24 06 06 21

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

STATION 00AT05AK2070 LAT. 49D 54M 15S LONG. 111D 31M 42S PR 3 UTM 12 462050E 5527900N SOUTH SASKATCHEWAN RIVER

06104F CARBON DISSOLVED ORGANIC C MG/L	2.06L 4.04L 1.06L 1.04L 2.06L	1. 2.06L 2.06L 3.06L 2.04L 4.06L 4.06L 5.06F	3.8.8.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.	4 4 4	તાંતાંનાં તાંતાંમતાં
06902F CARBON ORGANIC PARTICULATE C MG/L	.26 02L .26 02L .55 02L	.74 02L 1.0 02L 9.4 02L 5.4	.68 1.7 02L 4.1 .97 .13 02L .29	.86 .59 .36 02L .40	.47 2.2 1.3 1.3 .28 .32 .32 .18
07902F NITROGEN PARTICUL. N	.05 02L .05 02L .10 02L	.09 02L .21 02L .1.3 02L .72	.18 .29 02L .45 .16 .04 02L .05	.58 .14 .07 02L .12	
10501L RESIDUE FIXED NONFILTR. MG/L	iimim	3. 15. 12. 18. 10. 184. 152. 138.	57. 26. 206. 206. 98. 111. 16.0 2.	ળ વ્યવ્ણ	86. 26. 10. 11. 3.
10401L RESIDUE NONFILTR.	111.5.4	4. 18. 15. 20. 12. 231. 201. 168. 151.	63. 28. 31. 224. 106. 17.0 3.	က်တော်က်ထွတ်	6. 30. 12. 1. 1. 5.
02073L TURBIDITY JTU	2 2 2 2 4 H	1.6 6.8 12. 7.6 7.6 64. 3.3	20.0 12. 12. 62.0 44. 45. 7.7 7.7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
02061S TEMPERATURE OF WATER DEG.C.		0. 0. 0. 0. 61F 13. 61F	13. 61F 19. 61F 23. 61F 17.2 61F		18. 61F 5. 61F 0. 61F 0. 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	08 01 80 1415 08 01 80 1420 29 01 80 1340 29 01 80 1345 19 02 80 1315	19 02 80 1320 11 03 80 1325 11 03 80 1335 25 03 80 1135 25 03 80 1140 09 04 80 1345 09 04 80 1350 22 04 80 1525 22 04 80 1530 06 05 80 1320	06 05 80 1325 22 05 80 1110 22 05 80 1110 04 06 80 1100 18 06 80 0755 16 07 80 1545 16 07 80 0830 30 07 80 0830	13 08 80 0730 26 08 80 1630 09 09 80 0830 09 09 80 1510 23 09 80 1410	07 10 80 1410 22 10 80 0810 05 11 80 0820 19 11 80 0820 10 12 80 0900 07 01 81 0800 28 01 81 0900 17 02 81 1600 10 03 81 1500

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 462050E 5527900N PR 33 111D 31M 42S P AT HIGHWAY #879 LONG. STATION 00AT05AK2070 LAT. 49D 54M 15S SOUTH SASKATCHEWAN RIVER

06104F CARBON DISSOLVED ORGANIC C	HG/L	2	.2	۲,	'n	4.	m.	'n.	'n.	2.	2.
06902F CARBON ORGANIC PARTICULATE C	MG/L	86.	1.5	99.	1.4	3.0	2.4	1.1	. 75		. 32
07902F NITROGEN PARTICUL. N	MG/L	.13	.26	.16	.18	.35	.30	.12	.12		.07
10501L RESIDUE FIXED NONFILTR.	MG/L	15.	34.	5.	24.	175.	254.	71.	33.	.9	.2
10401L RESIDUE NONFILTR.	MG/L	17.	37.	φ.	29.	190.	267.	80.	37.	11.	'n.
02073L TURBIDITY	로	8.0	20.0	0.4	18.0	70.	73.		24.		.7
02061S TEMPERATURE OF WATER	DEG.C.		8.0 61F	13.0 61F	14.0 61F	19.0 61F	14.0 61F	16.0 61F	Z0.0 61F	13.8 61F	20. 61F
Mans	OI	0426	0456	0456	0426	0426	9250	0456	0456	0456	0456
SAMPLE DATE		03 81	07 04 81 1700	04 81	05 81	05 81	18 90	08 07 81 0710	07	09 81 (60

1.2

.23 .05 .05 .08

ST ST ST W

4.6.6.1.0

0.0.0.0

0426 0426 0426 0426 0426

81 81 82 82

10 11 02 02 02

23000

61F 61F 61F 61F 61F

1100 1400 1300 1100 10

83

16

φ.

11.

4.9

3.0 61F

0426

82 1445

90

03

10301L 06152F 10106L 10151L 02041L 17206L 17206L PH CARBON ALKALINITY ALKALINITY SPECIFIC CHIORIDE 101530LVED 101530LV	14105L	REACTIVE		SIOS	HG/L													
10301L 06152F 10106L 10151L PH CARBON ALKAIINITY ALKAIINITY SUBH DISSOLVED TOTAL PHTALEIN CACO3 PHTALEIN PH PHTALEIN CACO3 PHTALEIN PH PHTALEIN PH PHTALEIN CACO3 PHTALEIN PH PH PH PH PH PH PH P	17206L	DISSOLVED		บ	HG/L													
AMPLE DATE SUBH Y HR ID PH UNITS F 91850 F 79 1855 F 79 1430 F 79 1255 F 79	02041L Specific	CONDUCT.			US/CM	410.	411.	327.	326.	323.	60	318.	315.	285.	300.	0	, , , ,	204.
AMPLE DATE NATURE DATE NATURE DATE HST HST HST NSOLVED INCREANIC C H Y HR ID PH UNITS DISSOLVED INCREANIC C HG/L OS 79 1850 O426 O5 79 1850 O426 O5 79 1430 O426 O426 O5 79 1430 O426 O5 79 1500 O426 O42	10151L	PHENOL	PHTHALEIN	CAC03	HG/L			0.	0.	0.	c	0	9	38.	68.	F. C.		
10301L PH FH HST HST HST HST HST HST HST OS 79 1820 0426 05 79 1430 0426 05 79 1430 0426 06 79 1420 0426 06 79 1420 0426 06 79 1200 0426 07 79 1205 0426	10106L	TOTAL	CAC03		MG/L	143.	143.	113.	113.	107.	107	107.	108.	76.	78.	69	2.7	000
AHPLE DATE HST HST T HR 1D 05 79 1820 0426 05 79 1855 0426 05 79 1430 0426 06 79 1420 0426 06 79 1265 0426 06 79 1265 0426 07 79 1265 0426 07 79 1265 0426 07 79 1265 0426	06152F	DISSOLVED	INGREANIC	ں	MG/L													
HST	10301L	•			PH UNITS			8.2	8.2	8.3	CC H	i 10	8.5	9.2	9.5	0	. 0	7 · K
SAMPLE DATE HST MST 15 05 79 1820 15 05 79 1855 29 05 79 1431 12 06 79 1420 12 06 79 1420 12 06 79 1245 26 06 79 1245 26 06 79 1245 26 06 79 1245 26 06 79 1245 26 06 79 1245 26 06 79 125 26 07 79 125 26 07 79 125 26 07 79 125 27 07 79 125 27 07 79 125				SUBH	ID	0426	0426	9250	0426	0456	0426	0426	0426	0456	9250	0426	9000	2000
			SAMPLE DATE	MST	D M Y HR	05 79	05 79	62 50	62 50	62 90	06 79	62 90	62 90	07 79	62 20	07 79	07 70	61 10

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05AK2070 LAT. 49D 54M 15S LONG. 111D 31M 42S PR 3 UTM 12 462050E 5527900N SOUTH SASKATCHEWAN RIVER

	14105L SILICA REACTIVE	S102 MG/L				00000 0000	4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.	6.2.2.1 6.2.2.1 7.	H H 4 4 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ਲ ਯਾਹੇ-4-ਘੰ
	17206L CHLORIDE DISSOLVED	CL CL					بر ش	rd 4 4 w w a o o a c	W W W I N	7.4.4 7.1.9.2
	02041L SPECIFIC CONDUCT.	NS/CM	354. 357. 309. 418.	421. 425. 458. 466.	429. 421. 530. 524.	529. 486. 480. 483.	465. 471. 431. 419. 377.	375. 385. 394. 328.	385. 387. 326. 325.	330. 381. 381. 378.
6	10151L ALKALINITY PHENOL	PHTHALEIN CACO3 MG/L	58. 106.	0,0,0,0	00000	00000	99999	° ° .	ηοοοο	ጥሪ . ኮ ፋ ኮ ሪን ፋ
AT HIGHWAY #879	10106L ALKALINITY TOTAL	CACO3 MG/L	67. 68. 77. 78.	117. 130. 131. 136.	130. 130. 130. 126.	171. 153. 155. 114.	144. 143. 120. 110.	110.01L 130.01L 130.01L 130.01L	115. 01L 114. 01L 114. 01L 115. 01L	117. 01L 108. 01L 106. 01L 108. 01L
	06152F CARBON DISSOLVED	INORGANIC C MG/L			42. 53L	42, 52L 37, 53L 36, 52L 29, 53L 30, 52L	25. 53L 27. 52L 22. 53L 23. 52L 18. 53L	19. 52L 28. 53F 26. 23. 53F 24.	23, 53F 23, 22, 52L 23, 23,	23. 24. 52L 22. 21.
IVER	10301L PH	PH UNITS	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	00000 00000	0 0 0 0 V W W S S S V	8.77.8 0.99.0	6.7.7.7. 6.7.7.7. 7.7.7.8.	7.7.7.8 7.8 7.8	8.00 7.7 1.3	8.88.4.7.
EMAN RJ		SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SOUTH SASKATCHEWAN RIVER		SAMPLE DATE MST D M Y HR	06 08 79 1300 06 08 79 1305 21 08 79 1425 21 08 79 1435 25 09 79 0740	25 09 79 0745 10 10 79 0655 10 10 79 0700 30 10 79 0755 30 10 79 0800	19 11 79 1525 19 11 79 1530 10 12 79 1540 10 12 79 1545 08 01 80 1415	08 01 80 1420 29 01 80 1340 29 01 80 1345 19 02 80 1315 19 02 80 1320	11 03 80 1325 11 03 80 1330 25 03 80 1135 25 03 80 1140 09 04 80 1345	09 04 80 1350 22 04 80 1525 22 04 80 1530 06 05 80 1320 06 05 80 1325	22 05 80 1110 22 05 80 1115 04 06 80 1100 18 06 80 0755 18 06 80 0800	02 07 80 1545 16 07 80 0635 16 07 80 0820 30 07 80 0830

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05AK2070 LAT. 49D 54M 15S LONG. 111D 31M 42S PR 3 UTM 12 462050E 5527900N SOUTH SASKATCHEWAN RIVER

14105L SILICA REACTIVE SIO2 MG/L	૱ૺઌઌઌ૽ ૱		4 E E E E E E E E E E E E E E E E E E E	ии. — нич пилаин чаюсо
17206L CHLORIDE DISSOLVED CL MG/L	4 w 4 w w	440NO GÓGUN	00000 000000 00000 000000 00000 000000	1.4 2.5 4.1 3.6 6.2 6.2 9.0 6.6
02041L SPECIFIC CONDUCT. US/CM	331. 312. 355. 351. 404.	375. 406. 412. 417. 538.	424. 420. 427. 403. 399. 418. 401. 343. 388.	323. 327. 325. 2325. 464. 464. 476. 476. 418.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	, w v w v	4. i	0. 8. 9. 16. 18. 16. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	1.2.2.0.0000000000000000000000000000000
10106L ALKALINITY TOTAL CACO3 MG/L	98. 01L 92. 01L 97. 01L 95. 01L 126. 01L	111. 01L 135. 01L 138. 01L 141. 01L 180. 01L	145. 011 140. 011 139. 011 128. 011 135. 011 135. 011 128. 011 128. 011	127. 011. 121. 011. 121. 011. 122. 011. 139. 011. 166. 011. 210. 011. 145. 011.
06152F CARBON DISSOLVED INORGANIC C MG/L	21. 19. 19. 52L 18.	25. 33. 42.	28 34 4 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6	28 2 3 3 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
10301L PH PH UNITS	80808 907.10	00000 70400		000000 000 00000 00000 00000 00000 00000 00000 0000
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	13 08 80 0730 26 08 80 1630 09 09 80 0830 09 09 80 1510 23 09 80 1410	07 10 80 1410 22 10 80 0810 05 11 80 0930 19 11 80 0820 10 12 80 0900	07 01 81 0800 28 01 81 0900 17 02 81 1600 22 03 81 0830 07 04 81 1700 22 04 81 1415 05 05 81 1445 15 06 81 1630	08 07 81 0710 27 07 81 1530 02 09 81 0725 08 09 81 1530 20 10 81 1100 20 10 81 1105 30 11 81 1400 09 01 82 1300 23 02 82 1100 03 04 82 1446

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 519894E 5543261N PR 0 LONG. 110D 43M 20S MEDICINE HAT STATION 00AT05AK2080 LAT. 50D 2M 36S SOUTH SASKATCHEWAN RIVER ABOVE

07506L NITROGEN TOTAL AMMONIA N MG/L	::::::	::::::			1.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	ब ंचंबंधं	55444	.5 .3 L.1
07110F NITROGEN DISSOLVED NO3 & NO2 N MG/L	.07 19F .07 .17 19F .16	.07 .03 .12 19F	.08 19F .18 L.01 19F .01 L.01 19F	L.01 L.01 19F .02 .90 19L	1.1 19L 1.1 10L 1.6 19L 1.6 10L 1.6 19L	1.5 10L 1.4 19L 1.4 10L 1.4 10L	1.1 19L .72 19L .68 10L .56 19L	.53 10L .30 19F .37 .16 19F
07661F NITROGEN DISSOLVED N	.23 .30 .29 51F	.19 51F .20 51F .31	.42 .25 51F .30 51F	.21 51F .24 .28 51F 1.6 61L 1.7 51L	1.3 61L 1.2 51L 2.5 61L 2.6 51L 1.8 61L	1.6 51L 1.5 61L 1.6 51L 1.8 61L 1.8 51L	1.2 61L 1.4 51L .99 61L 1.0 51L	1.2 51L .53 .79 51F .31
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	L.003 66F L.003 .005 66F .008 L.003 66F	L.003 66F L.003 66F L.003 66F L.003	L.003 66F L.003 66F L.003 66F L.003 66F	L.003 .003 66F .003 66L .004 66L	.044 66L .044 56L .092 66L .092 56L	.10 56L .084 66L .084 56L .15 66L	.12 66L .13 56L .073 66L .068 56L	.053 56L .041 66F .039
15356F PHOSPHORUS DISSOLVED INORG. PO4 P MG/L	L.003 46F .005 .007	.008 L.003 46F L.003 46F L.003	.006 46F .004 46F L.003 46F	L.003 .007 46F .007 46E .008 46L .006 56L	.049 46L .046 56L .093 46L .092 56L .10 46L	.10 56L .16 46L .16 56L	.13 46L .13 56L .085 46L .072 56L	.069 56L
15103F PHOSPHORUS DISSOLVED P MG/L	.023 13F .016 .023 .022 13F	.011 13F .011 .014 .010 .010	.011 13F .008 .022 13F .008	.006 .008 13F .008 13L .008 03L	.055 13L .052 03L .11 13L .11 03L	.11 03L .16 13L .16 03L	.14 13L .14 03L .095 13L .085 03L	.077 03L .057 13F .057
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.26 .20 .15 .16	.082 .031 .030 .007	.010 .010 .008 .009	.009 .012 .009 .019	.058 .058 .096 .11	 7 7	.16 .11 .10 .17	.18 .16 .19
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	118 11.	.10 .047 .024 .026	.020 .019 .022 .027	.016 .018 .029	.072 .067 .11 .11	112 112 71	71.72.12.12.12.12.	.23 .21 .20
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	22 05 79 1245 22 05 79 1300 04 06 79 1155 04 06 79 1200 18 06 79 1115	18 06 79 1130 04 07 79 1135 04 07 79 1145 17 07 79 1530 17 07 79 1545	31 07 79 0620 31 07 79 0630 18 09 79 0610 18 09 79 0615 01 10 79 1655	01 10 79 1700 17 10 79 1355 17 10 79 1400 06 11 79 0755 06 11 79 0800	26 11 79 1355 26 11 79 1400 17 12 79 1255 17 12 79 1300 14 01 80 1355	14 01 80 1400 04 02 80 1430 04 02 80 1435 25 02 80 1445	17 03 80 1555 17 03 80 1600 31 03 80 1530 31 03 80 1535 14 04 80 1330	14 04 80 1335 28 04 80 1810 28 04 80 1815 12 05 80 1820

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 519894E 5543261N 0 ద LONG. 110D 43M 20S MEDICINE HAT 2M 36S STATION 00AT05AK2080 LAT. 50D SOUTH SASKATCHEWAN RIVER ABOVE

07506L NITROGEN TOTAL AMMONIA N		4444			ww.iii			
07110F NITROGEN DISSOLVED NO3 & NO2 N	.11 .21 19F .18 .28 10L	.01 L.01 L.01 L.01 L.01	L.01 L.01 L.01 .01 L.01	. 46		.35 L.01 .14 L.01	L.01 L.01 L.01	11.0
07661F NITROGEN DISSOLVED N MG/L	.26 51F .43 .35 51F .54 61L	.14 .20 61L .23 .23	.18 .25 61L .26 .25	.72 .54 .83 1.2	. 79 1.1 1.1 . 82 . 78	. 59 . 30 . 43		1.6 2.1 1.5
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.007 .011 66F .005 L.003 56L L.003	. 005 L.003 L.003 L.003 L.003	L.003 L.003 L.003 L.003 L.003	.035 .021 .025 .044	.040	.048 .022 .005 L.003	L.003 L.003 L.003	.073
15356F PHOSPHORUS DISSOLVED INORG. PO4 P MG/L	.010 .019 46F .016 .011 56L	.005 L.003 L.003 .005	.003 L.003 L.003 L.003	.037 .021 .035 .056	.068 .11 .072 .057	.058 .047 .010 L.003 L.003	L.003 .004 .005	.080
15103F PHOSPHORUS DISSOLVED P MG/L	.025 .022 13F .016 .025 03L	.005 .003 .003 .008	.007 .006 03L .006 .011	.045 .032 .051 .068	.068 .11 .088 .057	.066 .070 .016 .011	.006 .006 .010 .010	.084 .080 .21 .16
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.16 .855 .855 .16	.019 .007 .008	.011 .007 .007 .031	.0659 .059 .061	.070	.092 .085 .15 .22 .021	.015 .011 .012 .013	.082 .080 .21
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.19 .90 .19 .19	.030 .007 .011 .032	.015 .012 .015 .053	. 072 . 073 . 073 . 079	.081 .15 .092 .43	.12 .13 .15 .23	.023 .023 .015 .030	.084
Bus	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	12 05 80 1825 26 05 80 1855 26 05 80 1900 09 06 80 1600 23 06 80 1815	07 07 80 1900 16 07 80 0745 21 07 80 1730 05 08 80 1830 18 08 80 1630	02 09 80 1630 09 09 80 0930 15 09 80 1600 29 09 80 1700 14 10 80 1630	29 10 80 1700 10 11 80 1300 24 11 80 1600 16 12 80 0830 16 12 80 0835	12 01 81 1500 02 02 81 1600 21 02 81 1630 14 03 81 1610 01 04 81 1730	13 04 81 1830 27 04 81 1720 11 05 81 1630 25 05 81 1803 08 07 81 0840	12 07 81 1630 17 08 81 1630 02 09 81 0840 28 09 81 1715 10 11 81 1400	15 12 81 0900 15 12 81 0905 08 02 82 1700 22 03 82 1430

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 519894E 5543261N PR 0 LONG. 110D 43H 20S MEDICINE HAT STATION 00AT05AK2080 LAT. 50D 2M 36S SCUTH SASKATCHEWAN RIVER ABOVE

07506L NITROGEN TOTAL AMMONIA N MG/L	m.							
07110F NITROGEN DISSOLVED NO3 & NO2 N	.70	06104F CARBON DISSOLVED ORGANIC C MG/L					2. 06L	2. 04L 2. 06L
07661F NITROGEN DISSOLVED N	8	06902F CARBON ORGANIC PARTICULATE C MG/L					.15 02L	.18 02L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.052	07902F NITROGEN PARTICUL. N HG/L	. 99 . 39 . 85 . 20	1.3	90.	.08	.07 02L .03 02L .03 02L	.04 02L
15356F PHOSPHORUS DISSOLVED INORG, PO4 P	. 054	10501L RESIDUE FIXED NONFILTR. MG/L	852. 836. 112. 117. 52.	61. 17. 20. 4.	3	, y <u>, y</u>	33743	ii
15103F PHOSPHORUS DISSOLVED P MG/L	090.	10401L RESIDUE NONFILTR. MG/L	912. 918. 127. 130. 54.	62. 251. 85.	2.0 L1.0 1. 2.	6. 6. 8.	::°°::	i:
15301L PHOSPHORUS TOTAL INCRGANIC P MG/L	71.	02073L TURBIDITY JTU	170. 170. 84. 86. 51.	51.	พพชชพ 4.ศ.ศ.ศ.	ชมมมน อัชมอัต	4 9 0 0 0 0	8.1.
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.21	02061S TEMFERATURE OF WATER DEG.C.	16. 16. 18. 17.5	17.5 19.5 19.5 24.5 24.5	20.5 20.5 16.	12	စ်စ်လ်လ်ဝ	00
SUBM	0426	SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAHPLE DATE NST D M Y HR	26 04 82 1530	SAMPLE DATE MST D M Y HR	22 05 79 1245 22 05 79 1300 04 06 79 1155 04 06 79 1200 18 06 79 1115	18 06 79 1135 04 07 79 1135 04 07 79 1145 17 07 79 1530 17 07 79 1545	31 07 79 0620 31 07 79 0630 18 09 79 0610 18 09 79 0615 01 10 79 1655	01 10 79 1700 17 10 79 1355 17 10 79 1400 06 11 79 0755 06 11 79 0800	26 11 79 1355 26 11 79 1400 17 12 79 1255 17 12 79 1300 14 01 80 1355	14 01 80 1400 04 02 80 1430

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 0 UTM 12 519894E 5543261N LONG. 110D 43M 20S MEDICINE HAT STATION 00AT05AK2080 LAT. 50D 2M 36S SOUTH SASKATCHEWAN RIVER ABOVE

06104F CARBON DISSOLVED ORGANIC C MG/L	2. 04L 2. 06L 1. 04L 3. 06L 3. 06L	5. 06L 4. 04L 4. 06L 7. 04L 3. 06F	3. 06F	3. 04L 2. 2. 3. 04L 3.				
06902F CARBON ORGANIC PARTICULATE C MG/L	.21 02L .36 02L	.54 02L 3.3 02L 3.2	12.2	2.4 02L 2.2 .98 .25 02L .35	.95 .68 .42 .32 02L	1.2 .40 .79	.22 .21 .16 .71	10.4
07902F NITROGEN PARTICUL. N	.03 02L	.10 02L .43 02L .48	.72	.36 02L .23 .11 .05 02L	.12 .11 .07 .06 02L	.16 .16 .08 .14	.02	1.6
10501L RESIDUE FIXED NONFILTR.	ijij'nĸi	8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	63. 187. 1118. 1045.	152. 74.0 10.0 5.	27. 4 6	33. 16. 17. 16.	4 i i i i i i i i i i i i i i i i i i i	285. 26. 13.
10401L RESIDUE NONFILTR. MG/L	ณ์ ค่ ค่ ค่ ค่ ร	66.00.00.00.00.00.00.00.00.00.00.00.00.0	73. 183. 202. 1191.	168. 89.0 11.0 6.	50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	38. 20. 21. 19.	หู พ.พ. ร.พ.พ.	313. 31. 15.
02073L TURBIDITY JTU	44.484	0.67.00	20.0 61.0 72.0 530.	74.0 38.0 5.7 P.	20. 4.55 5.65 5.6	17. 13. 14. 9.2	3.0 15.3 4.2	190. 14.0 8.4 4.3
02061S TEMPERATURE OF WATER DEG.C.	10. 10. 18.	0. 61F 0. 61F 3. 61F 17. 61F	17. 61F 15. 61F 15. 61F 14. 61F	13. 61F 19. 61F 18.8 61F 24.0 61F	18.0 61F 17.0 61F 20. 61F 16.3 61F 13. 61F	15.5 61F 9. 61F 5. 61F 7. 61F	0. 61F	8.0 61F 6.0 61F 14.0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	04 02 80 1435 25 02 80 1440 25 02 80 1445 17 03 80 1555 17 03 80 1600	31 03 80 1530 31 03 80 1535 14 04 80 1330 14 04 80 1335 28 04 80 1810	28 04 80 1815 12 05 80 1820 12 05 80 1825 26 05 80 1855 26 05 80 1900	09 06 80 1600 23 06 80 1815 07 07 80 1900 16 07 80 0745 21 07 80 1730	05 08 80 1830 18 08 80 1630 02 09 80 1630 09 09 80 0930 15 09 80 1600	29 09 80 1700 14 10 80 1630 29 10 80 1700 10 11 80 1300 24 11 80 1600	16 12 80 0830 16 12 80 0835 12 01 81 1500 02 02 81 1600 21 02 81 1630	14 03 81 1610 01 04 81 1730 13 04 81 1830 27 04 81 1720

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 519894E 5543261N 0 PR STATION 00AT05AK2080 LAT. 50D 2M 36S LONG. 110D 43M 20S SOUTH SASKATCHEWAN RIVER ABOVE

	06104F CARBON DISSOLVED ORGANIC C MG/L		คํคํคํคํคํ	ni mi di	14105L SILICA REACTIVE SIO2 MG/L			
	06902F CARBON ORGANIC PARTICULATE C MG/L	3.2 1.1 .80 .88	1:1 1:3 .19	. 8. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	17206L CHLORIDE DISSOLVED CL MG/L			
	07902F NITROGEN PARTICUL. N MG/L	. 26 . 38 . 16 . 14	. 20	. 06	02041L SPECIFIC CONDUCT. US/CM	320. 318. 309. 309.	304. 372. 372. 333.	377. 398. 437. 472.
	10501L RESIDUE FIXED NONFILTR.	308. 1320. 141. 31. 13.		3. 10. 72.	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000	20°. 9°.	17.0
MEDICINE HAT	10401L RESIDUE NONFILTR.	334. 1354. 155. 35.	23. 23. 1.0	4. 12. 79.	10106L ALKALINITY TOTAL CACO3 MG/L	113. 113. 112. 112. 116.	117. 112. 113. 88.	96. 93. 1114. 1114.
MEDIC	02073L TURBIDITY JTU	140. 330. 22. 5.8	4.5 16.0 1.8 2.5	2.8 8.6 33.	06152F CARBON DISSOLVED INORGANIC C MG/L			
IVER ABOVE	O2061S TEMPERATURE OF WATER DEG.C.	12.0 61F 14.0 61F 17.5 61F 21.0 61F 24. 61F	15. 61F 11. 61F .0 61F	.0 61F 4. 61F 10.0 61F	10301L PH PH UNITS	8 8 8 8 8	0 0 0 0 0 0 0 0 0	00000 7.7.2.2.2.
EWAN R	SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426	SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426
SOUTH SASKATCHEWAN RIVER ABOVE	SAMPLE DATE MST D M Y HR	11 05 81 1630 25 05 81 1800 08 07 81 0840 12 07 81 1630 17 08 81 1630	02 09 81 0840 28 09 81 1715 10 11 81 1400 15 12 81 0900 15 12 81 0905	08 02 82 1700 22 03 82 1430 26 04 82 1530	SAMPLE DATE MST D M Y HR	22 05 79 1245 22 05 79 1300 04 06 79 1155 04 06 79 1200 18 06 79 1115	18 06 79 1130 04 07 79 1135 04 07 79 1145 17 07 79 1530 17 07 79 1545	31 07 79 0620 31 07 79 0630 18 09 79 0610 18 09 79 0615 01 10 79 1655

NAGUADAT DETAILED REPORT PH DIC ALK COND CL SIO2 PR 0 UTM 12 519894E 5543261N LONG. 110D 43M 20S MEDICINE HAT STATION 00AT05AK2080 LAT. 50D 2M 36S SOUTH SASKATCHEWAN RIVER ABOVE

14105L SILICA REACTIVE SIO2 MG/L		2.0		8 5 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 1 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	w 4 w n o n o o	رنا نوخ خ	41.01.
17206L CHLORIDE DISSOLVED CL MG/L				0044 	7 4 4 6 7 6 4 7 6 4 6 7	W 1 1 1 4 7 7 7 7 7 7 1 1 1 1 1 1 1 1 1 1	6.1 5.0 5.2 5.7	5 4 4 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
02041L SPECIFIC CONDUCT. US/CM	460. 473. 488. 479. 503.	594. 594. 535.	542. 543. 510. 511. 496.	490. 310. 308. 408.	408. 405. 319. 346.	341. 314. 299. 335.	387. 386. 351. 369.	405. 410. 389. 415.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	•••••	0.000	00000	. 4 m 0. 0. 0. 0.		.04	7.4 5.1 3.0 2.6	9.0.1 0.0.1 0.0.4
10106L ALKALINITY TOTAL CACO3 MG/L	114. 120. 136. 136. 134.	169. 171. 169. 172.	165. 170. 167. 168.	127. 110. 01L 110. 01L 120. 01L	140.01L 130.01L 125.01L 127.01L 112.01L	105. 01L 115. 01L 111. 01L 109. 01L	108. 01L 107. 01L 101. 01L 101. 01L	111. 01L 126. 01L 125. 01L 140. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L			38. 53L 37. 52L 30. 53L 32. 52L 28. 53L	29. 52L 17. 53L 17. 52L 21. 53L 25. 52L	25. 53F 25. 23. 53F 24. 23. 53F	23. 23. 52L 23. 24. 52L	22. 22. 20. 21. 21.	25. 30. 28.
10301L PH PH UNITS		8.0 7.9 7.9	808.7.	V 6 6 6 6 6 70 4 70 0	8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	000000 00000	8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 7.4 77.0
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	10 79 1355 110 79 1400 111 79 0755 111 79 1355 111 79 1400		04 02 80 1430 04 02 80 1435 25 02 80 1440 25 02 80 1445 17 03 80 1555	17 03 80 1600 31 03 80 1530 31 03 80 1535 14 04 80 1330 14 04 80 1335	28 04 80 1810 28 04 80 1815 12 05 80 1820 12 05 80 1825 26 05 80 1855	26 05 80 1900 09 06 80 1600 23 06 80 1815 07 07 80 1900 16 07 80 0745	21 07 80 1730 05 08 80 1830 18 08 80 1630 02 09 80 1630 09 09 80 0930	15 09 80 1600 29 09 80 1700 14 10 80 1630 29 10 80 1700

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

LONG. 110D 43H 20S PR 0 UTM 12 519894E 5543261N HEDICINE HAT STATION 00AT05AK2080 LAT. 50D 2M 36S SOUTH SASKATCHEWAN RIVER ABOVE

14105L SILICA REACTIVE SIG2	MG/L	75,	1.0	1.9	2.0	4.1	3.4	5.6	2.7	.7	7.	4.	3.4	5.7	1.4	1.2	1.3	9.	9.	4.	1.0	6.	4.4	3.2	3.3
17206L CHLORIDE DISSOLVED CL	MG/L	3.9	5.1	7.9	7.8	3.8	5.2	5.4	5.4	7.0	5.0	4.7	3.7	1.3	2.0	2.4	3.1	4.1	5.3	5.2	8.7	8.7	8.7	12.	5.9
02041L SPECIFIC CONDUCT.	US/CM	378.	420.	506.	505.	396.	423.	395.	398.	467.	445.	392.	342.	319.	318.	316.	311.	340.	398.	417.	521.	529.	478.	420.	353.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	MG/L	2.1	0.	0.	0.	0.	0.	0.	0.	0.	7.0	14.0	0.	0.	0.	0.9	2.0	ъ.	٠.	0.	0.	0.	0.	0.	0.
10106L ALKALINITY TOTAL CACO3	HG/L	135. 01L						126. 01L							122. 01L		113. 01L	120. 01L					180. 01L		120. 01L
06152F CARBON DISSOLVED INORSANIC C	MG/L	36.	34.	38.	37.		37.	30.	38.	43.	33.	30.	27.	28.	29.	29.	26.	30.	21.	25.	42.	44.	47.	36.	26.
10301L PH	PH UNITS	8.6	4.8	8.0	8.2	8.1	7.9	8.0	8.2	8.5	8.7	9.0	8.3	8.0	8.5	8.8	8.8	8.5	4.8	8.2	8.2	8.2	7.5	7.7	8.1
SUBM	ID	0426	0456	0426	0456	0426	0426	0426	0456	0426	0426	0426	0426	0456	0456	0426	0426	0456	0456	9250	0426	0426	0456	0426	0456
SAMPLE DATE MST	D M Y HR	11 80	24 11 80 1600	12 80	12 80	01 81	02 81	21 02 81 1630	03 81	04 81	04 81	04 81	05 81	05 81	08 07 81 0840	07 81	08	02 09 81 0840	09 81	11 81	12 81	12 81	08 02 82 1700	03 82	90

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS STATION 00AT05AK2085 LAT. 50D 3M 43S LONG. 110D 39M 13S PR 3 UTM 12 524800E 5545350N SOUTH SASKATCHEWAN RIVER

07506L NITROGEN TOTAL AMMONIA N		######################################	 	7111.	1	<u> </u>	w w
07110F NITROGEN DISSOLVED NO3 & NO2 N	.08 19F .08 .17 19F .21	.06 .02 19F .01 .01 19F	.03 19F .14 .02 19F .07 19F	.07 L.01 19F .03 .90 19L .85 10L	1.1 19L 1.1 10L 1.6 19L 1.5 10L 1.6 19L	1.5 10L 1.3 19L 1.4 10L 1.4 10L	1.1 19L .80 10L
07661F NITROGEN DISSOLVED N	.25 .27 51F .31 .38 51F	.16 51F .36 .24 51F .23 51F	.26 .32 51F .34 .30 51F	.39 51F .25 .38 51F 1.7 61L 1.7 51L	1.4 61L 1.3 51L 2.9 61L 2.7 51L 1.8 61L	2.0 51L 1.6 61L 1.6 51L 1.9 61L 1.8 51L	1.4 61L 1.5 51L
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	L.003 66F .006 66F .009	.011 L.003 66F L.003 L.003 66F L.003	L.003 66F L.003 66F L.003 .023 66F	.021 L.003 66F .003 .007 66L .007 56L	.048 66L .047 56L .10 66L .10 56L	.11 56L .10 66L .11 56L .15 66L .16 56L	.14 66L .13 56L
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.007 46F .008 .010 46F .017 46F	.009 L.003 46F L.003 46F L.003	.005 46F .004 .005 46F .004	.021 .012 46F .008 .012 46L .007 56L	.055 46L .052 56L .11 46L .12 56L .11 46L	.11 56L .16 46L .16 56L	.14 46L .14 56L
15103F PHOSPHORUS DISSOLVED P MG/L	.018 13F .019 .024 13F .024	.024 .014 13F .013 .009 13F	.014 13F .017 .015 13F .012 .048 13F	.031 .015 13F .011 .014 13L	.071 13L .060 03L .13 13L .13 03L	.12 03L .16 13L .16 03L	.14 13L .14 03L
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.22 .20 .160 .16	.034 .034 .037 .010	.015 .017 .011 .015	.033 .024 .021 .030	.060	112	.18
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	355 118 118 086	.084	.026 .023 .025 .021	.053 .035 .035 .041	.075 .075 .13 .13	.13 .13 .18 .18	.20
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	22 05 79 1010 22 05 79 1050 04 06 79 1330 04 06 79 1400 18 06 79 1310	18 06 79 1330 04 07 79 1345 04 07 79 1400 17 07 79 0955 17 07 79 1015	31 07 79 0820 31 07 79 0835 17 09 79 0525 17 09 79 0530 01 10 79 1520	01 10 79 1525 17 10 79 1215 17 10 79 1220 05 11 79 1555 05 11 79 1600	26 11 79 1255 26 11 79 1300 17 12 79 1210 17 12 79 1215 14 01 80 1225	14 01 80 1230 04 02 80 1355 04 02 80 1400 25 02 80 1410 25 02 80 1415	17 03 80 1515 17 03 80 1520

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 524800E 5545350N STATION OGATOSAK2085 LAT. 50D 3M 43S LONG. 110D 39M 13S PR 3 SOUTH SASKATCHEWAN RIVER

06104F CARBON DISSOLVED ORGANIC C MG/L		2	3. 04L
06902F CARBON ORGANIC PARTICULATE C		.24 02L .45 02L .74 02L	
07902F NITROGEN PARTICUL. N MG/L	. 69 . 60 . 64 L . 01 . 16 . 12 . 04 . 11 . 10 . 12 . 14 02L . 07 02L	.04 02L .08 02L .12 02L .14 02L	
10501L RESIDUE FIXED NONFILTR.	68.68.68.69.69.69.69.69.69.69.69.69.69.69.69.69.	;; ij.,,,,; įį	œ.
10401L RESIDUE NONFILTR. MG/L	470. 1866. 1866. 1866. 243. 34. 35. 36. 11. 11. 11.	.i i i i i i i i i i i i i i i i i i i	13.
02073L TURBIDITY JTU	150. 150. 866. 67. 67. 75.3 7.7 7.7 7.3 8.4 7.4 7.4 7.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8	. บ . ช เพ พ . ซ ช ร ช ฮ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ ซ	8.7
02061S TEMPERATURE OF WATER DEG.C.	14.5 14.5 18. 18. 18. 20.5 20.5 23.5 23.5 11. 11. 11. 11. 11. 11. 11. 11. 11. 11.	 	
SUBH	00426 00	0426 0426 0426 0426 0426 0426 0426	0456
SAMPLE DATE MST D M Y HR		17 12 79 1215 14 01 80 1225 14 01 80 1230 04 02 80 1355 04 02 80 1400 25 02 80 1410 25 02 80 1415 17 03 80 1515	17 03 80 1520

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 524800E 5545350N STATION 00AT05AK2085 LAT. 50D 3M 43S LONG. 110D 39M 13S PR 3 SOUTH SASKATCHEWAN RIVER

14105L SILICA REACTIVE SIO2 MG/L					9.1	1	2.8
17206L CHLORIDE DISSOLVED CL MG/L							
02041L SPECIFIC CONDUCT. US/CM	324. 324. 311. 316.	306. 372. 377. 347. 342.	378. 404. 446. 496.	490. 486. 495. 485.	517. 457. 594. 600. 534.	533. 543. 543. 517.	492.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000	.0 .0 .0	9. 1.1 3.4	v. 8. 0. 0.	0.0.0.0	•••••	0.0.
10106L ALKALINITY TOTAL CACO3 MG/L	113. 113. 113.	117. 113. 113. 89.	98. 96. 114. 117.	120. 122. 124. 136.	134. 138. 174. 175.	166. 174. 173. 167.	126.
06152F CARBON DISSOLVED INORGANIC C MG/L					41. 53L	36. 52L 38. 53L 37. 52L 32. 53L 32. 52L	28. 53L 29. 52L
10301L PH PH UNITS	8 8 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8 8 8 8 8 8 8 6 8 7 7 7 .	0 0 0 0 0 7 7 6 0 5	000000 1.4.4.4.4.	8.2 8.0 8.0 7.9	8.0 7.7 7.7	7.9
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	05 79 05 79 06 79 06 79	18 06 79 1330 04 07 79 1345 04 07 79 1400 17 07 79 0955 17 07 79 1015	31 07 79 0820 31 07 79 0835 17 09 79 0525 17 09 79 0530 01 10 79 1520	01 10 79 1525 17 10 79 1215 17 10 79 1220 05 11 79 1555 05 11 79 1600	26 11 79 1255 26 11 79 1300 17 12 79 1210 17 12 79 1215 14 01 80 1225	14 01 80 1230 04 02 80 1355 04 02 80 1400 25 02 80 1410 25 02 80 1415	17 03 80 1515 17 03 80 1520

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 524450E 5554200N PR 3 LONG. 110D 39M 28S BELOW MEDICINE HAT STATION 00AT05AK2087 LAT. 50D 8M 30S SOUTH SASKATCHEWAN RIVER

07506L NITROGEN TOTAL AMHONIA N	ท่างจ๋ง่า				111	4 6 6 1 1 1	11:11	1111
07110F NITROGEN DISSOLVED NO3 & NO2 N	.68 10L .68 10L .60 19L .68 10L .43 19F	.48 .15 19F .17 .15 19F	.27 10L .30 L.01 .02	.0. .03 .04 .05	L.01 .55 .48 .78	.50 .85 .74 .75	. 37 L. 01 . 23 . 25 . 33	.45 L.01 .05 1.4
0761F NITROGEN DISSOLVED N HG/L	1.1 61L 1.0 51L 1.3 61L 1.3 51L	.95 51F .35 .55 51F .42 .38 51F	.45 61L .39 .16 .25	.23 .21 .20	.20 .58 .59 .1.5	1.11.01.0	64 65 65 65 65 65 65	.58 .18 .31
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.077 66L .079 56L .066 66L .064 56L	.040 .022 66F L.003 .006 66F L.003	L.003 56L .008 .005 L.003	L.003 L.003 L.003	L.003 .019 .021 .021	.047 .12 .081 .064	.012 .008 L.003	.023 L.003 L.003
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.084 46L .087 56L .081 46L .072 56L	.028 46F .009 .015 46F	.011 56L L.003	.005 L.003 .007 L.003	L.003 .019 .025 .027	.047 .11 .084 .075	.059 .043 .012 L.003	.030 L.003 .007 .12
15103F PHOSPHORUS DISSOLVED P MG/L	.099 13L .093 03L .10 13L .12 03L	.063 .043 13F .022 .021 13F	.027 03L .022 .005 .004	.009 .006 .005 .016	.007 .029 .035 .051	.070 .12 .093 .075	.063 .062 .023	.035 .010 .015
15301L PHOSPHORUS TOTAL INORSANIC P MG/L	.14 .15 .20 .20	.19	. 24 . 025 . 011	.022 .021 .010 .014	.015 .039 .063 .072	.083 .12 .11 .095	.097 .088 .19 .25	.063 .015 .033 .14
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.16 .17 .25 .26	.23 .55 .54	.24 .094 .042 .018	.034 .021 .020 .030	.026 .046 .079 .083	.084 .12 .11 .095	.11 .14 .22 .27 .098	.14 .020 .054 .15
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	31 03 80 1415 31 03 80 1420 14 04 80 1445 28 04 80 1325	28 04 80 1330 12 05 80 1605 12 05 80 1610 26 05 80 1625 26 05 80 1630	09 06 80 1545 23 06 80 1600 07 07 80 1500 21 07 80 1600 05 08 80 1545	18 08 80 1445 02 09 80 1435 02 09 80 1440 15 09 80 1515 29 09 80 1500	14 10 80 1500 29 10 80 1510 10 11 80 1530 24 11 80 1450 15 12 80 1519	12 01 81 1410 02 02 81 1500 22 02 81 0930 14 03 81 1440 01 04 81 1600	13 04 81 1700 27 04 81 1600 11 05 81 1430 25 05 81 1330 15 06 81 1300	27 07 81 1745 08 09 81 1300 20 10 81 0800 01 12 81 0930

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

PR 3 UTM 12 524450E 5554200N

NO3 & NO2 DISSOLVED NITROGEN 07110F MG/L 2.0 NITROGEN DISSOLVED 07661F MG/L 11.9 z DISSOLVED ORTHO PO4 P PHOSPHORUS 15256F MG/L 118 PHOSPHORUS DISSOLVED INORG. PO4 15356F MG/L .13 STATION 00AT05AK2087 LAT, 50D 8M 30S LCNS, 110D 39M 28S SOUTH SASKATCHEWAN RIVER PHOSPHORUS DISSOLVED 15103F P MG/L .19 .20 .14 15301L PHOSPHORUS TOTAL INORGANIC P MG/L .18 .24 .18 PHOSPHOROUS PHOSPHATE TOTAL MG/L .20 ۵ SOUTH SASKATCHEWAN RIVER 0426 0426 0426 0426 SUBM 09 01 82 1100 22 02 82 1500 03 04 82 1530 03 04 82 1535 SAMPLE DATE M Y HR MST ۵

NITROGEN TOTAL AMMONIA MG/L

67.55

t.	- A O		190	750	790	750	06F						750														
1901.90	CARBON DISSOLVED ORGANIC	MG/L	4.							2.							4.					'n			2.		
41	ATE		021		02L								02L														
96902	CARBON ORGANIC DI PARTICULATE C	MG/L	1.1		3.0		2.8		4.8		6.2		5.6	1.9	1.1	.56	2.5	99.	.53	.52	.84	.76	77.	.38	.70	.28	.41
ш	U.	MG/L	021		02L								021				.28										
07000	NITROGEN PARTICUL.	MG/L	.18		.35		.50		.78		.73		.37	.24	.16	60.	.28	.11	.11	60.	.19	.16	.13	.07	.10	.24	.11
1.0	RESIDUE FIXED	٦.								•				0.	0.												
ר	RES RES PI	MG/L	20	22	70	55	80	67		219	559	628	184	76	18	6	105	15	7	7	2	37	6	9	20.	20	10
110	RESIDUE	7												0.	0.												
1001	NON	MG/L	24	56	96	85	93	78	243	236	569	675	202	86	19	11	115	17	10	6	4	45	12	8	23	23	11
7.1	DITY		7.4	9.	۲.	.3	ø0.	0.	0.	ī.			0.		6.7	.8	φ.	Ľň.	.7	Pñ.	٣.	14.	9.5	0.		4.	5.
0.00	TURBIDITY	UTU	7	7	S	4	9	32.0	92	45	330	300	58	36	9	7	9	7	4	4	M	14	6	7	10	0	5
ď	un E		61F	61F		24.0 61F	61F	61F					61F	61F	61F												
1,40,80	TEMPERATURE OF WATER	DEG.C.	0.	0.	7.	7.	17.	17.	16.	16.	16.	16.	18.	20.		24.0	21.0	20.0	19.	19.	15.	17.	10.	65	5.		
	SUBM	01	0426	0456	0456	0456	0426	0426	0456	0426	0456	0456	0426	0456	0426	0456	0426	0426	0456	0456	0456	0456	0456	0456	0456	0456	0456
	SAMPLE DATE MST	또	1415	1420	1440	1445	1325	1330	1605	1610	1625	1630	1545	1600	1500	1600	1545	1445	1435	1440	1515	1500	1500	1510	1530	1450	1519
	PLE H	>	80	80	80	80	80	80	80	80	80	80	80	80	80	80		80			80	80	80	80	80	80	80
	SAM	T O		1 03						2 05					07 07						15 09				10 11		
		_	M	31	ř	ř	ิ	2	H	12	2	2	0	2	0	2	0	ī	0	0	7	2	-	67	Н	N	p-i

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 524450E 5554200N PR 3 LONG. 110D 39M 28S BELOW MEDICINE HAT LAT. 50D 8M 30S STATION 00AT05AK2087 L SOUTH SASKATCHEWAN RIVER

06104F CARBON DISSOLVED							'n						W.	3.	.4	м.	ů.	4.	ທ໌ທໍ
06902F CARBON ORGANIC	PARTICULATE C	MG/L	.19	.12	.27	59.	1.1	1.1	2.1	3.7	4.9	1.6	.70	69.	1.6	.47	.21		1.0
07902F NITROGEN PARTICUL.	z	MG/L	.03	50 °	.11	.14	.21	.23	.36	44.	.50	.21	.13	.10	.32	60.	.04	.20	.19
10501L RESIDUE FIXED	NONFILTR.	MG/L	۳۶.	Μ,	7.	32.	29.	23.	10.	93.	2180.	122.	15.	'n	.9	ø	.: ::	35.	16. 18.
10401L RESIDUE NONFILTR.		MG/L	.9	.4	0	37.	33.	26.	14.	105.	2240.	132.	17.	s.	ø,	10.	.1.	41.	18. 21.
02073L TURBIDITY		,	4.5			9.6	14.0	14.0	5.0	130.	320.	50.	16.	2.2	5.7	5.5	φ.	24.	13.
02061S TEMPERATURE OF	MATER	DEG.C.	0. 61F				7.0 61F	6.0 61F	13.0 61F	12.0 61F	17.0 61F	14.0 61F	20.0 61F	19. 61F	6.0 61F	.0 61F	.0 61F	.0 61F	
	SUBM	IO	0426	0426	0426	0426	0456	0426	0426	0426	0426	0456	0426	0426	0426	0426	0456	0426	0426
	SAMPLE DATE	D M Y HR	01 81	02 81	02 81		04 81	04 81	04 81	05 81	25 05 81 1330	06 81	07 81	08 09 81 1300	10 81	12 81	01	02 82	03 04 82 1530 03 04 82 1535

14105L SILICA REACTIVE	2018	MG/L	1.6	1.6	3.8	3.6	3.5	3.6	2.6	2.3	3.0	3.1	4.1
17206L CHLORIDE DISSOLVED	บ	MG/L	8.6	8.5	5.1	5.1	4.3	4.5	2.3	2.4	3.5	J.	1.7
02041L SPECIFIC CONDUCT.		US/CM	329.	323.	452.	434.	412.	409.	327.	324.	367.	359.	316.
10151L ALKALINITY PHENOL	PHTHALEIN CACO3	MG/L	8.7	0.	0.	0.	0.	Ö		0.	0.	0.	0.
, <u>Ł</u>			011	011	011	016	016	011	011	016	016	01F	016
10106L ALKALINITY TOTAL	CAC03	MG/L	110.	110.	120.	120.	140.	140.	126.	122.	106.	117.	116.
06152F CARBON DISSOLVED	INORGANIC	MG/L		19. 52L				25	24. 53F			24.	23. 52L
10301L PH		PH UNITS	4.6	9.4	8.0	8.0	7.9		8.0	8.2	8.0	8.0	8.0
	SUBM	ID	0426	0426	0426	0426	0456	9650	0426	0426	0426	0456	0426
	SAMPLE DATE MST	D M Y HR	03	31 03 80 1420	04 80	04 80	04 80	70	80	05 80	05 80	05 80	09 06 80 1545

PH DIC ALK COND CL SI02 51

NAQUADAT DETAILED REPORT

UTM 12 524450E 5554200N M R LONG. 110D 39M 28S HAT BELOW MEDICINE 8M 30S LAT. 50D SOUTH SASKATCHEWAN RIVER STATION 00AT05AK2087

REACTIVE SILICA 141051 SIOS MG/L 1.4 w ~ 6 4 6 4 04040 4.6.4 L.1 L.1 3.8 3.8 8 ei ei DISSOLVED CHLORIDE 17206L 1.8 3.0 4.9 5.5 CL MG/L 6.0 6.0 7.0 7.0 7.0 5.5 3.6 7.4 21. 11. 6.8 5.8 7.6 7.6 6.4 5.0 2.0 2.9 13. SPECIFIC CONDUCT. 02041L 301. 343. 398. 411. 365. 431. 424. 382. 426. 385. 431. 548. 435. 342. 515. 395. 418. 482. 396. 349. 329. 330. 589. 447. 10151L ALKALINITY PHENOL PHTHALEIN CAC03 MG/L 6.0 6.0 6.0 2.0 0.0.0.0.0 0000 0.0 01L 01L 01L 01L 011 01L 01L 01L 01L 01L 01L 016 016 01L 01L 01L 01L 01L 01L 01L OIL 01L 01L 011 016 01L 016 ALKALINITY TOTAL 10101 111. 109. 103. 106. 108. 108. 112. 128. 136. 142. 174. 140. 143. 125. 128. 142. 129. 118. 117. 121. 111. 147. 173. 219. 130. CAC03 MG/L DISSOLVED INORGANIC 06152F CARBON 21. 22. 26. 29. MG/L 22.22. 35. 34. 27. 28. 28. 26. 27. 30. 42. 49. 32. PH UNITS 10301L PH 8.3 8.8 88.7 888888 0.08.00 9.0 7.9 8.2 9.6 8.88.7.7.83.7.7 7.9 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 SUBM 0426 0456 0456 0426 0426 0426 G 1500 1600 1545 1435 1515 1500 1510 1450 1519 1500 1600 1600 1430 1330 1300 1745 1300 0930 1100 1530 1600 1440 SAMPLE DATE H MST > 80 80 81 81 82 82 82 81 81 81 81 81 81 81 81 Σ 00 07 08 08 000 110 002 003 004 004 004 09 10 12 01 02 50 23 07 21 05 2002 29 10 15 12 12 02 22 14 01 08 20 01 09 22 03 0 27 111 25 15 15

PAGE 52

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 556600E 5609150N STATION 00AT05AK2090 LAT. 50D 38M OS LONG. 110D 12M OS PR 3 SOUTH SASKATCHEWAN RIVER

07506L NITROGEN TOTAL AMMONIA N MG/L					1.1. 1.4.4.E.	พ่พ่พ่ด่า	. 4 L L 4	.4 L.1
07110F NITROGEN DISSOLVED NO3 & NO2 N	.14 19F .14 .23 19F .19 .04 19F	.05 19F .05 19F .04 L.01 19F L.01	L. 01 19F . 06 L. 01 19F L. 01 19F	L.01 L.01 19F L.01 .23 19L .23 10L	1.2 19L 1.2 10L 1.7 19L 1.6 10L 1.4 19L	1.4 10L 1.5 19L 1.5 10L 1.3 19L 1.3 10L	1.2 19L 1.4 10L .76 19L .80 10L .60 19L	.66 10L .17 19F .18
07661F NITROGEN DISSOLVED N MG/L	.30 .31 51F .39 .33 51F	.15 51F .23 .26 51F .18	.21 .27 51F .30 .26 51F	.20 51F .27 51F .40 61L .42 51L	1.3 61L 1.3 51L 2.3 61L 2.2 51L 1.6 61L	1.7 51L 1.8 61L 1.9 51L 1.5 61L 1.4 51L	1.8 51L 1.0 61L 1.0 51L 1.0 61L	1.1 51L .48 .45 51F
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 66F L.003 .006 66F .008	.005 L.003 66F L.003 L.003	L.003 66F L.003 66F L.003 66F L.003 66F	L.003 66F L.003 66F L.003 66L L.003 56L	.008 66L .008 56L .035 66L .036 56L	.068 56L .082 66L .10 56L .095 66L	.14 66L .13 56L .059 66L .061 56L	.041 56L .020 66F .036 .013 66F
15356F PHOSPHORUS DISSOLVED INORG. PO4 P	.004 46F .005 46F .007	.014 L.003 46F L.003 46F L.003	.003 46F L.003 .005 46F L.003 46F	L.003 .004 46F .004 46F .006 46L .006 56L	.011 46L .013 56L .036 46L .039 56L	.069 56L .10 46L .10 56L .096 46L	.14 46L .14 56L .072 46L .069 56L	.058 56L .029 46F .039
15103F PHOSPHORUS DISSOLVED P P MG/L	.016 13F .016 .024 13F .021	.009 13F .009 13F .009 13F	.009 13F .010 .008 13F .006	.005 .007 13F .011 .007 13L .006 03L	.020 13L .016 03L .047 13L .039 03L	.079 03L .10 13L .11 03L .11 13L	.15 13L .15 03L .080 13L .075 03L	.072 03L .051 13F .056
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	. 22 . 22 . 23 . 23	.003	. 048 . 046 . 005 . 005	.003 .008 .004 .016	. 020 . 019 . 043 . 045	0.000	.17 .16 .10 .092	.15 .14 .14
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.30 .27 .26	.09	.057 .066 .015	.018	. 025 . 024 . 047 . 088	.081 .11 .12 .11	.19 .11 .12 .23	.19
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	22 05 79 0600 22 05 79 0630 04 06 79 1625 04 06 79 1630 18 06 79 1555	18 06 79 1620 04 07 79 1705 04 07 79 1730 17 07 79 1320 17 07 79 1325	30 07 79 1520 30 07 79 1540 17 09 79 1310 17 09 79 1315 01 10 79 1135	01 10 79 1140 17 10 79 0725 17 10 79 0730 05 11 79 1255 05 11 79 1300	26 11 79 1055 26 11 79 1100 17 12 79 0955 17 12 79 1000 14 01 80 1040	14 01 80 1045 04 02 80 1115 04 02 80 1120 25 02 80 1155 25 02 80 1200	17 03 80 1115 17 03 80 1120 31 03 80 1125 31 03 80 1130 14 04 80 1115	14 04 80 1120 28 04 80 0955 28 04 80 1000 12 05 80 1155

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 556600E 5609150N	
PR 3	
	4Y #41
12H	IGHW
1100	- AT H
LONG.	'
08	
. 50D 38M 0S LONG. 110D 12M 0S	
LAT.	
STATION 00AT05AK2090	SOUTH SASKATCHEMAN RIVER

07506L NITROGEN TOTAL AMMONIA N	::::::			ורר. נייי נייי	5.E. 5.I.I.			L.1 4.
07110F NITROGEN DISSOLVED NO3 & NO2 N	.07 .02 19F .01 .34 10L	.01 L.01 .02 L.01 L.01	L.01 L.01 .01 .01	.70 .70 1.0 74.	. 755 . 756 . 757 . 750	. 43 01 01	L.01 L.01 L.01	1.1
07661F NITROGEN DISSOLVED N MG/L	.25 51F .16 .16 .15 .55 61L .38 .38	.15 .15 61L .32 .22 .21	.18 .20 61L .63 .25	.82 .61 .76 .77	. 97. 1.3 7.7 86	. 23	112	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.010 .003 66F L.003 .004 56L	.009 L.003 56L L.003 L.003	L.003 L.003 L.003 L.003 L.003	.004 .007 .022 .019	.088 .090 .099 .045	. 022 L. 003 L. 003 L. 003	L.003 L.003 L.003	L.003 .075 .17
15356F PHOSPHORUS DISSOLVED INORG, PO4 P MG/L	.015 .012 46F .005 .011 56L	L.003 56L L.003 L.003	.003 L.003 L.003 L.003	.006 .013 .024 .040	.090 .090 .11 .045	.034 .006 .004 L.003	L.003 .005 .005 L.003	.003
15103F PHOSPHORUS DISSOLVED P MG/L	.026 .015 13F .006 .024 03L	.009 .003 03L .005	.003 .003 03L .010 .007	.011 .028 .051 .074	.090 .090 .11 .045	.035 .015 .024 .001	. 000 . 000 . 005 . 005	.007
15301L PHOSPHORUS TOTAL INORGANIC P MG/L	.15 .12 .11 .29	. 046 	.008 .004 .010 .008	.036 .067 .060 .051	.091 .096 .12 .080	.085 .043 .10 .77	.076 .011 .006 .017	.051 .084 .18
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.16 .15 .16	.060 .011 .041 .013	.011 .008 .019 .017	. 053 . 092 . 069 . 074	.097	.12 .068 .14 .92	. 076 . 028 . 034 . 033	.069
SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	26 05 80 1200 26 05 80 1155 26 05 80 1200 09 06 80 1200 23 06 80 1300	07 07 80 1140 16 07 80 1050 21 07 80 1200 05 08 80 1300 18 08 80 1210	02 09 80 1215 09 09 80 1205 15 09 80 1215 29 09 80 1200 14 10 80 1215	29 10 80 1315 10 11 80 0900 24 11 80 1200 15 12 80 1220 12 01 81 1014	02 02 81 1200 02 02 81 1210 21 02 81 1300 14 03 81 1240 01 04 81 1300	27 04 81 1345 27 04 81 1300 11 05 81 1130 25 05 81 1200 08 07 81 1120	12 07 81 1400 17 08 81 1410 17 08 81 1415 02 09 81 1125 28 09 81 1400	10 11 81 1100 15 12 81 1040 08 02 82 1200 22 03 82 1140

PAGE 54

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

STATION 00AT05AK2090 LAT. 50D 38M 0S LONG. 110D 12M 0S PR 3 UTM 12 556600E 5609150N SOUTH SASKATCHEWAN RIVER

07506L NITROGEN TOTAL AMMONIA N	MG/L	ų
07110F NITROGEN DISSOLVED NO3 & NO2	MG/L	.80
07661F NITROGEN DISSOLVED N	MG/L	1.0
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	MG/L	.062
15356F PHOSPHORUS DISSOLVED INORG, PO4	MG/L	.068
15103F PHOSPHORUS DISSOLVED P	MG/L	.076
15301L PHOSPHORUS TOTAL INORGANIC P	MG/L	.19
15406L PHOSPHOROUS TOTAL PHOSPHATE P	MG/L	. 22
SUBM	ID	0456
SAMPLE DATE MST	D M Y HR	26 04 82 1330

06104F CARBON DISSOLVED ORGANIC C MG/L					2. 06L	2. 04L 2. 06L
06902F CARBON ORGANIC PARTICULATE C MG/L					.21 02L	.22 02L
07902F NITROGEN PARTICUL. N MG/L		. 20	. 09 . 09	.09 .14 02L	.07 02L .04 02L .04 02L	.04 02L
10501L RESIDUE FIXED NONFILTR.	324. 326. 275. 277. 65.	69. 44. 13.	131.5 4.8 1.	15. 1.1. 7.	iiiiii	ii
10401L RESIDUE NONFILTR. MG/L	376. 384. 313. 303. 67.	72. 56. 52. 4.	146.1 9.7 1. 1.		iiiiii	L1.
02073L TURBIDITY JTU	190. 175. 145. 125.		63. 63. 1.9	40000	6 8 8 1 1 1 1 2 4 4 6 4 6 4 6 4 6 4 6 4 6 6 6 6 6 6 6	1.6
02061S TEMPERATURE OF WATER DEG.C.	133. 138. 188.	21. 21. 21. 24. 24. 24.	23. 18. 11.			. ·
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
SAMPLE DATE MST D M Y HR	22 05 79 0600 22 05 79 0630 04 06 79 1625 04 06 79 1630 18 06 79 1555	18 06 79 1620 04 07 79 1705 04 07 79 1730 17 07 79 1320 17 07 79 1325	30 07 79 1520 30 07 79 1540 17 09 79 1310 17 09 79 1315 01 10 79 1135	01 10 79 1140 17 10 79 0725 17 10 79 0730 05 11 79 1255 05 11 79 1300	26 11 79 1055 26 11 79 1100 17 12 79 0955 17 12 79 1000 14 01 80 1040	14 01 80 1045 04 02 80 1115

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

SOL

TATION 00AT05AK2090	LAT. 50D 38M	N85 0	90	0S LONG.	110D 12M 0S PR 3	0.8	PR 3	UTM 12 556600E 5609150N
OUTH SASKATCHEWAN RIVE	2			,	- AT HIGHWA	AY #4	7	

06104F CARBON DISSOLVED ORGANIC C MG/L	2. 04L 2. 06L 2. 06L 3. 06L 3. 06L	3.06L 3.06L 3.06L 4.06L	4. 2. 06F 2. 06F 3.	4. 04L 2. 2. 3. 04L 3.		ที่ที่ณี่ณี่ณี		
06902F CARBON ORGANIC PARTICULATE C	.27 02L .63 02L	.71 02L 2.1 02L 4.6	2 7.2	5.6 02L 2.5 1.2 .25 02L 1.7	.34 .36 .32 .26 02L	1.1 1.0 1.3 .95	. 25 . 26 . 16	2.50
07902F NITROGEN PARTICUL. N MG/L	.05 02L	.11 02L .24 02L .73	.69	.61 02L .28 .19 .04 02L	.05 .04 .05 .07 02L	111111111111111111111111111111111111111	10000 10000 10000 10000	.1143
10501L RESIDUE FIXED NONFILTR. MG/L		16. 16. 74. 69. 59.	64. 113. 121. 135.	245. 127. 19.0 3. 76.	30000	8. 26. 33.	19.	11. 77. 39.
10401L RESIDUE NONFILTR. MG/L	37.99.	16. 18. 83. 70.	77. 125. 131. 143.	269. 138. 20.0 4.	တ်ထိထိက်တ်	10. 12. 31. 37. 24.	21. 9. 3. 4.	14. 82. 28.
02073L TURBIDITY JTU	40000	0 0 0 k k c c c k k c	27.0 52.0 37.0 55.	145. 48. 7.1 35.	8.4.4. R	6.0 8.5 18. 18.	12. 6.7 4.0 6.8	36.0 19.0 7.0
02061S TEMPERATURE OF WATER DEG.C.	ិស្ត សំសុស្ត	1. 61F 1. 61F 8. 61F 8. 61F	15. 61F 15. 61F 18. 61F 18. 61F	18. 61F 20. 61F 21.9 61F 22.0 61F	18.0 61F 20.0 61F 19. 61F 16.7 61F 14. 61F	17. 61F 11. 61F 9. 61F 2. 61F	0. 61F	8.0 61F 5.0 61F 13.0 61F
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	04 02 80 1120 25 02 80 1155 25 02 80 1200 17 03 80 1115 17 03 80 1120	31 03 80 1125 31 03 80 1130 14 04 80 1115 14 04 80 1120 28 04 80 0955	28 04 80 1000 12 05 80 1155 12 05 80 1200 26 05 80 1155 26 05 80 1200	09 06 80 1200 23 06 80 1300 07 07 80 1140 16 07 80 1050 21 07 80 1200	05 08 80 1300 18 08 80 1210 02 09 80 1215 09 09 80 1205 15 09 80 1215	29 09 80 1200 14 10 80 1215 29 10 80 1315 10 11 80 0900 24 11 80 1200	15 12 80 1220 12 01 81 1014 02 02 81 1200 02 02 81 1210 21 02 81 1300	14 03 81 1240 01 04 81 1300 13 04 81 1345 27 04 81 1300

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 556600E 5609150N PR 3 STATION 00AT05AK2090 LAT. 50D 38M 0S LONG. 110D 12M 0S P South Saskatcheman River

06104F CARBON DISSOLVED ORGANIC C	મહિમેહાં હહામેનમ	vių.	14105L SILICA REACTIVE SIO2 MG/L
06902F CARBON ORGANIC PARTICULATE C MG/L	2.6 .68 .86 .87 .87 .87	.27	17206L CHLORIDE DISSOLVED CL MG/L
07902F NITROGEN PARTICUL. N MG/L	.39 .12 .13 .15 .14 .18	.12	02041L SPECIFIC CONDUCT. US/CM 334. 334. 334. 308. 308. 308. 308. 358. 359. 359. 359. 359. 366. 467. 466.
10501L RESIDUE FIXED NONFILTR.	289. 1872. 77. 43. 18. 18. 21. 10. 18. 28.	83. 83.	10151L ALKALINITY PHENOL PHTHALEIN CACG3 MG/L .0 .0 .0 .0 .0 .0 .0 .1 .13. 13. 113. 1
10401L RESIDUE NONFILTR. MG/L	314. 1908. 83. 48. 21. 25. 16. 19. 29.	9.00	10106L ALKALINITY TOTAL CACO3 MG/L 113. 114. 116. 119. 119. 119. 119. 119. 119. 119
02073L TURBIDITY JTU	230. 230. 23. 8.8 9.9 18.0	6.7	O6152F CARBON DISSOLVED INCRGANIC C MG/L
02061S TEMPERATURE OF WATER DEG.C.	12.0 61F 15.0 61F 19.8 61F 21.0 61F 24. 61F 16. 61F 11. 61F 7. 61F	.0 61F 4. 61F 10.0 61F	10301L PH PH UNITS 8.0 8.0 8.3 8.3 8.3 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.8 8.6 8.8 8.6 8.6
SUBM	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426	SUBM 10 10 10 10 10 10 10 10 10 10 10 10 10
SAMPLE DATE MST D M Y HR	11 05 81 1130 25 05 81 1200 08 07 81 1120 12 07 81 1410 17 08 81 1415 02 09 81 1125 28 11 1000 15 12 81 1040	08 02 82 1200 22 03 82 1140 26 04 82 1330	SAMPLE DATE MST D M Y HR 22 05 79 0600 22 05 79 0630 04 06 79 1625 04 06 79 1555 18 06 79 1556 18 06 79 1556 18 07 79 1705 04 07 79 1705 07 07 79 1315 01 10 79 1315 01 10 79 1315

PAGE 57

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05AK2090 LAT. 50D 38M 0S LONS. 110D 12M 0S PR 3 UTM 12 556600E 5609150N SOUTH SASKATCHEWAN RIVER

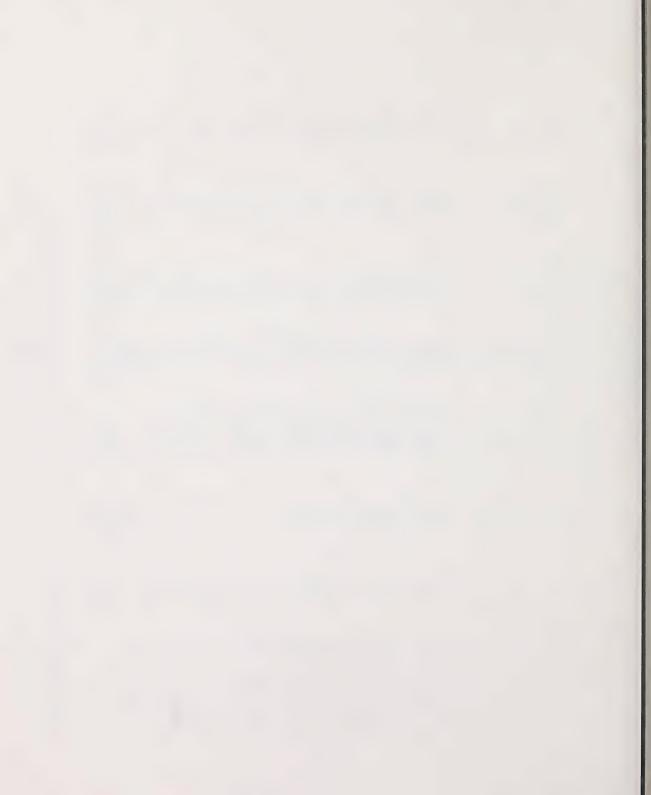
14105L SILICA REACTIVE SIO2 MG/L		1.2	3.00	2.22 2.25 2.25 7.	. 4 w . w w 4 o	oʻoʻa'rivi	្ត ភេទលេស ភ
17206L CHLORIDE DISSOLVED CL MG/L			0 0 0 0 0 0 0 0 0 0 0	N 4 N N W G Q Q Q W	8 1 1 3 8 7 8 7 5 8	4 W 4 W W W G O W O	0 N 4 N N 0 4 N
02041L SPECIFIC CONDUCT. US/CM	519. 520. 510. 512. 506. 497. 600.	529. 557. 564. 524. 520.	499. 311. 312. 434.	458. 458. 328. 326. 382.	368. 318. 299. 335.	398. 402. 378. 400.	426. 454. 493.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	60000 0000	0 00000	0.7.7		4		1.3.2.
10106L ALKALINITY TOTAL CACG3	126. 125. 136. 136. 137. 180.	166. 176. 182. 166. 167.	126. 120. 01L 110. 01L 120. 01L	150. 01L 150. 01L 121. 01L 121. 01L 114. 01L	124. 01L 113. 01L 110. 01L 105. 01L	110. 01L 104. 01L 106. 01L 108. 01L	115. 01L 131. 01L 124. 01L 142. 01L
06152F CARBON DISSOLVED INORGANIC C	35. 53.	35. 52L 39. 53L 40. 52L 31. 53L 32. 52L 28. 53L	29. 52L 17. 53L 18. 52L 25. 53L 26. 52L	26. 53F 26. 53F 23. 53F 24. 53F	25. 23. 52L 22. 22. 25. 52L	23. 22. 22. 22. 22.	27. 30. 28.
10301L PH PH UNITS	000000 00000 000000 000000000000000000	0. V. W. W. V. V.	7.7 4.8 4.8 9.0 0.8	<u> </u>	\$0 0 0 0 0 \$0.1.50.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8 8 8 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
SUBM	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	17 10 79 0725 17 10 79 0730 05 11 79 1255 05 11 79 1300 26 11 79 1055 26 11 79 1100 17 12 79 0955 17 12 79 1000 14 01 80 1040	01 80 02 80 02 80 02 80 02 80 03 80	17 03 80 1120 31 03 80 1125 31 03 80 1130 14 04 80 1115 14 04 80 1120	28 04 80 0955 28 04 80 1000 12 05 80 1155 12 05 80 1200 26 05 80 1155	26 05 80 1200 09 06 80 1200 23 06 80 1300 07 07 80 1140 16 07 80 1050	21 07 80 1200 05 08 80 1300 18 08 80 1210 02 09 80 1215 09 09 80 1205	15 09 80 1215 29 09 80 1200 14 10 80 1215 29 10 80 1315

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

STATION 00AT05AK2090 LAT. S0D 38M OS LONG. 110D 12M OS PR 3 UTM 12 556600E 5609150N SOUTH SASKATCHEWAN RIVER

14105L SILICA REACTIVE SIO2 MG/L		8.5.0 0.1 7.1	1.6 1.6 1.6	11. 1. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	1.0 4.3 3.9
17206L CHLORIDE DISSOLVED CL MG/L	4 W O W 4	40000	6.15.5 7.15.5 6.0 7.15.5 7.15.	99 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	80 / / 0 0 0 0 0
02041L SPECIFIC CONDUCT. US/CM	388. 426. 548. 412. 423.	423. 448. 414. 480. 470.	377. 334. 348. 320. 326.	316. 317. 334. 394. 452.	534. 489. 418. 357.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	00000	0.0%.0.	34 H	ым ө ж й й й о	0,0,0,0
10106L ALKALINITY TOTAL CACO3 MG/L	135. 01L 143. 01L 181. 01L 140. 01L	141. 01L 142. 01L 129. 01L 148. 01L	106. 01L 115. 01L 121. 01L 118. 01L	114. 01L 114. 01L 112. 01L 119. 01L	187. 01L 185. 01L 140. 01L 115. 01L
06152F CARBON DISSOLVED INORGANIC C MG/L	4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	++++++++++++++++++++++++++++++++++++++	27. 28. 38.	26.05.05.05.05.05.05.05.05.05.05.05.05.05.	44. 47. 36.
10301L PH PH UNITS	00000 00000	80 80 80 80 80 80 80 80 80 80 80 80 80 8	800 V 00 0 V 80 0 4 0	ซอยอย จัจจังที่ผ	8 7.7 7.5 8.0
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	10 11 80 0900 24 11 80 1200 15 12 80 1220 12 01 81 1014 02 02 81 1200	02 02 81 1210 21 02 81 1300 14 03 81 1240 01 04 81 1300 13 04 81 1345	27 04 81 1300 25 05 81 1130 08 07 81 1120 12 07 81 1400	17 08 81 1410 17 08 81 1415 02 09 81 1125 28 09 81 1400 10 11 81 1100	15 12 81 1040 08 02 82 1200 22 03 82 1140 26 04 82 1330

B-2 NAQUADAT printout of algal growth potential and biologically available phosphorus



LONG. 112D 51M 42S PR 3 UTM 12 363050E 5396700N ABOVE LETHBRIDGE STP OUTFALL STATION 00AT05AD2035 LAT. 48D 42M 37S OLDMAN RIVER AT HIGHWAY #3,

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSPHORUS MS/L		.002 .002 .003 .003	.001 .002 .001 .001 .001		.002
54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSFHOGUS MG/L	.003	.002	.003 .005 .005 .002	.001 .001 .003 .002 .001	.005
54101L FILTERED ALGAL GRCWTH FOTENTIAL SELENASTRUM CELLS/HL 17.	નું લું લું લું લું	4. 2. 35. 17. 7.	10		4404
	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST M Y HR 05 79 0900 06 79 1400	79 1140 79 1315 79 1120 79 1600 79 1345 79 1300 79 1330	79 0900 80 1100 80 0945 80 0915 80 1330 80 1000 80 1000 80 1430		80 1210 80 1215 80 1200 80 1215 80 1215 80 1220 80 1600 80 1320 81 1310	81 1700 81 1330 81 1400 81 1430
0 86	19 06 05 07 18 07 31 07 18 09 02 10 06 11	27 11 15 01 05 02 26 02 18 03 18 03 01 04 29 04	05 06 07 07 08	119 08 003 09 09 15 10 09 15 10 10 11 11 11 11 11 11 11 11 11 11 11	22 02 15 03 02 04 14 04

LONG. 112D 51M 42S PR 3 UTM 12 363050E 5396700N ABOVE LETHBRIDGE STP OUTFALL STATION 00AT05AD2035 LAT. 48D 42M 37S OLDMAN RIVER AT HIGHWAY #3,

54601L DISSOLVED BIOLCGICALLY AVAILABLE PHOSFHORUS	MG/L	.001	010.	.002	.005	.001	
54611L PARTICULATE BIOLOGICALLY AVAILABLE FHOSPHORUS	MG/L	.034	.002	.070	.053	.002	
54101L FILTERED ALGAL GROWTH POTENTIAL SELENASTRUM	CELLS/ML	15.	7.	12.	15.	2.	จำทำ ทั
SUBM	ID	0456	0456	0426	0456	0456	
SAMPLE DATE	H	1335	1315	1630	1315	1345	1655 1315 1525
TE I	>	81	81	81	81	81	81
SAME	I	50	05	05	90	07	09
0,	۵	28	12	56	16	13	28 09 29

UTM 12 383300E 5523900N URE BUTTE)

PR 3 U.					
LONG. 112D 37M 24S PR 3 U BELOW LETHBRIDGE (BELOW PICTU	54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSFHORUS			.106	.116
308	54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	.004	.011 .008 .008 .002 .008	.005 .017 .009 .020	.037
STATION 00AT05AD2050 LAT. 49D 51M OLDMAN RIVER AT HIGHWAY #845,	54101L FILTERED ALGAL GROWTH POTENTIAL SELENASTRUM CELLS/NL	20. 20. 6.	29. 13. 288. 76.	117. 1110. 1370. 963. 493.	105.
AD2050 T HIGH	SUBH	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
OATOS VER A	SAMPLE DATE MST M Y HR	0605 1155 0940 1130 0935	1415 1200 1130 0730 1230	0800 0915 0845 0815 1150	0820
ON ON N	PLE MST	79 79 79 79	79 79 79 79 79 79	79 80 80 80 80	80
ATI	SAM	05 06 07 07	07 09 10 10	11 01 02 02 03	90
ST	. 0	23 05 13 18	31 18 02 18	27 15 05 26 18	15

LONG. 112D 37H 24S FR 3 UTM 12 383300E 5523900N BELOW LETHBRIDGE (BELOW PICTURE BUTTE) STATION 00AT05AD2050 LAT. 49D 51M 30S OLDMAN RIVER AT HIGHWAY #845,

.042 .030 .002 .001	.089 .069 .025 .100	.115 .041 .047 .012	.020 .080 .093 .029	.090 .113 .035 .021	.002
.062 .017 .361		.008	.005 .001 .005 .047	.018 .000 .023 .006	960.
156. 29. 21. 33. 44.	13. 19. 15.	35. 61. 72. 189. 238.	87. 127. 223. 309. 81.	96. 37. 273. 52.	38. 36. 36.
0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426
0 04 80 1200 3 05 80 1200 7 05 80 1130 0 06 80 1130 4 06 80 1130	8 07 80 1230 22 07 80 1145 6 08 80 1145 9 08 80 1030 13 09 80 1100	6 09 80 1045 50 09 80 1430 5 10 80 1045 60 10 80 1130 1 11 80 1435	5 11 80 1200 3 01 81 1140 3 02 81 1245 2 02 81 1600 5 03 81 1230	2 04 81 1200 4 04 81 0300 8 04 81 1200 2 05 81 1145 6 05 81 1400	16 06 81 1100 13 07 81 1155 28 07 81 1545 09 09 81 1150 29 09 81 1350
	04 80 1200 0426 29017 05 80 1200 0426 21017 05 80 1130 0426 21361 06 80 1130 0426 33008	04 80 1200 0426 29062 005 005 00 130 0426 29017 005 005 00 1130 0426 21361 005 005 005 005 005 005 005 005 005 00	04 80 1200 126. .062 05 80 1200 0426 29. .017 05 80 1130 0426 21. .361 06 80 1130 0426 44. .008 07 80 1130 0426 13. .008 07 80 1145 0426 19. .004 08 80 1030 0426 5. .018 09 80 1100 0426 5. .009 09 80 1045 0426 15. .009 09 80 1045 0426 5. .009 09 80 1100 0426 5. .009 10 80 1130 0426 5. .009 10 80 1145 0426 61. .009 10 80 1145 0426 51. .009 10 80 1145 0426 15. .009 10 80 1145 0426 2236. .009 10 80 1145 0426 238. .009	04 80 1200 126. .062 05 80 1200 0426 29. .017 05 80 1130 0426 33. .017 06 80 1130 0426 44. .008 06 80 1130 0426 44. .008 07 80 1145 0426 19. .004 08 80 1045 0426 19. .004 08 80 1145 0426 15. .009 09 80 1145 0426 15. .009 09 80 1100 0426 15. .009 10 80 1430 0426 41. .009 11 80 1430 0426 51. .009 11 80 1435 0426 238. .006 11 80 1445 0426 238. .008 11 80 1445 0426 223. .008 11 80 1445 0426 2238. .006 11 80 1446 0426 2238. .006 11 80 1445 0426 2238. .0047 02 81 1600	04 80 1200 126. .062 05 80 1200 0426 29. .017 05 80 1130 0426 33. .017 06 80 1130 0426 33. .008 06 80 1130 0426 13. .008 07 80 1230 0426 10. .004 08 80 1045 0426 10. .004 08 80 1045 0426 15. .008 09 80 1145 0426 15. .008 09 80 1430 0426 15. .008 01 80 1130 0426 15. .008 01 80 1130 0426 15. .008 01 80 1130 0426 18. .008 01 81 1140 0426 238. .008 01 81 1140 0426 233. .005 02 81 1200 0426 233. .005 04 81 1200 0426 309. .013 04 81 1200 0426 233. .006 04 81 1200

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

STAT

5531300N	
UTM 12 450000E 5531300	
12	
MTU	
м	
PR 3	
485	
41M	
1110	
LONG. 111D 41M 48S	
25	
56M	
LAT. 49D 56M	
-	
7	THE MOUTH
2602	THE
SAG	AT
TO	2
00	IVE
10	04
ATION 00A	DITA

54601L DISSOLVED BIOLOSICALLY AVAILABLE FHOSFHORUS MG/L			.121	.051 .095 .030	.007	.001 .002 .003 .002	.003 .004 .003 .003	.004 .016 .040
54611L PARTICULATE BIOLOGICALLY AVAILABLE FHOSPHORUS MG/L	900 .			.003 .016 .074	.020 .008	.001 .004 .003 .001		.002 .023 .020
54101L FILTERED ALGAL GRCNTH FOTENTIAL SELEMASTRUM CELLS/ML	39. 26. 56.	18. 19. 26.	91. 109. 1190. 1500. 455.	49. 745. 160. 73.	76. 18. 67. 14.	2. 15. 18. 12.	44. 21. 38. 24.	18. 183. 73.
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	2 05 79 1700 5 06 79 0915 9 06 79 0735 5 07 79 0850 8 07 79 015	31 07 79 1115 18 09 79 0915 02 10 79 0830 17 10 79 1630 06 11 79 1000	26 11 79 1530 14 01 80 1535 04 02 80 1615 25 02 80 1710 18 03 80 0830	31 03 80 1720 14 04 80 1710 14 04 80 1715 29 04 80 0830 13 05 80 0910	27 05 80 0745 10 06 80 0830 24 06 80 0915 08 07 80 0830 22 07 80 0900	06 08 80 0930 19 08 80 0820 03 09 80 0900 16 09 80 0830 30 09 80 0830	10 80 11 80 11 80 01 81	3 02 81 1030 2 02 81 1200 5 03 81 1020 2 04 81 0930

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP REQUEST 0001 PAGE

LAT. 49D 56M 2S LONG. 111D 41M 48S PR 3 UTM 12 450000E 5531300N STATION 00AT05AG2095 OLDHAN RIVER AT THE M

•		
ALION CONTINUOUS CALL TITLE THIS TALL TO CALL THE TOTAL THE TALL THE TOTAL THE TALL		
j		
5		
1		
٤		
2		
-		
-		
2		
1		
;		
Ş		
•		
3		
=		
1		
2		
	-	
	5	
,	£	
	벋	
5	<u>-</u>	
2	α α	
2	[VE]	
	2	
7	DHAN RIVER AT THE MOUTH	
1	0	

5410L 5461L 5460L FILTERED PARTICULATE DISSOLVED ALGAL GROWTH BIOLGGICALLY BIOLGGICALLY FOTENTIAL AVAILABLE AVAILABLE OFFITSAH MASHORY PHOSPHORUS OFFITSAH MASHORY	24002	306040	32004		12.	2.	2.	2.	,
AI SUBH SI	0426	0456	0456	0456	0426				
SAMPLE DATE MST M Y HD	1015	0830	0830	0660	1815	1520	1220	0925	1175
PLE I				81		81			ć
SAMP	. 50		05		90	07		60	c

۵

14 12 12 26 15

21 28 09 29

STATION 00AT05AK2070 LAT. 49D 54H 15S LONG. 111D 31H 42S FR 3 UTM 12 462050E 5527900N SOUTH SASKATCHEWAN RIVER

01M 12 462050E 552																			
LAI: 47D 54H 155 CONS. 111D 51H 465 FK 5 OIM 12 402U5UE 552.	54601L DISSOLVED BIOLOSICALLY	AVAILABLE PHOSPHORUS	MG/L																
150 COM	54611L PARTICULATE BIOLCSICALLY	AVAILABLE PHOSPHORUS	MG/L				.015	900.		.003	.005		.008	.008	.012	.011	.030	.016	.021
H	54101L FILTERED ALGAL GROWTH	FOTENTIAL SUBM SELENASTRUM	CELLS/ML	23.	30.	118.	31.	ů,	31.	ъ.	9.	. 9	©	.00	636.	1540.	1940.	1790.	1090.
EMAN R		SUBM	ID	0456	0426	0426	0426	0456	0426	0426	0426	0456	0426	0426	0426	0456	0456	0456	0426
SOUTH SASKATCHEWAN RIVER		SAMPLE DATE MST	D M Y HR	05	05	12 06 79 1500	62 90	10 07 79 1215	24 07 79 1235	08		62 60	10 10 79 0700		19 11 79 1530	12	08 01 80 1420	29 01 80 1345	19 02 80 1320 0426

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 12 462050E 5527900N STATION 00AT05AK2070 LAT. 49D 54M 15S LONG. 111D 31M 42S PR 3 SOUTH SASKATCHEWAN RIVER

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSFHORUS MG/L	.181 .165 .032	.026	.000 .017 .034 .016	.002 .002 .001 .001	.003 .048 .078 .085 .150 .179 .138	.078 .084 .034 .025
54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	. 076	.061	.011/ .052 .039	200. . 0008 . 0009 . 0009	.0057 .029 .015 .003 .008	.013 .020 .020 .028 .073
54101L FILTERED ALGAL GROWTH FOTENTIAL SELENASTRUM CELLS/ML	1270.	966.	10. 414. 333. 145.	, 0, W, C, 4	10. 706. 745. 642. 1070. 643. 1214. 910.	612. 779. 309. 1199. 313. 279. 189.
SUBM	0426	0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426
SAMPLE DATE MST D M Y HR	11 03 80 1330 25 03 80 1140 09 04 80 1350	04 80	22 05 80 1115 04 06 80 1100 18 06 80 0800 02 07 80 1545 16 07 80 0820	30 07 80 0830 13 08 80 0730 26 08 80 1630 09 09 80 1510 23 09 80 1410	07 10 80 1410 05 11 80 0810 19 11 80 0820 10 12 80 0900 07 01 81 0800 28 01 81 0900 17 02 81 1600 17 02 81 1500	03 81 04 81 05 81 05 81 06 81 07 81 09 81
	7 10 0		JAJA		00011 0011	0 00001 00

? 0 UTM 12 519894E 5543261N								
0S PR	C C S S S S							
LONG. 110D 43M 20S MEDICINE HAT	54601L DISSOLVED BIOLOSICALLY AVAILABLE PHOSFHORUS MS/L			.153	.087 .048 .047 .011	.029 .001 .001	.001	.040 .031 .045 .033
2M 36S LONG. MEDIC	54611L PARTICULATE BIOLOSICALLY AVAILABLE FHOSFHORUS HG/L	ю 00		.005	.005 .075 .051 .029	.0055 .0009 .001		.012 .016 .012 .004
LAT. 50D IVER ABOVE	54101L FILTERED ALGAL GROWTH FOTENTIAL SELENASTRUM CELLS/ML	131. 14. 5.	w 8 4 8 8 1	499. 1600. 1810. 1940.	578. 694. 181. 107. 217.	196. 261. 1. 3.	ល់ស់ថ្ក់ស់	346. 288. 511. 377. 857.
AK2080 ENAN R	SUBM	0426 0426 0426 0426 0426						
STATION 00AT05AK2080 LAT. 5 SOUTH SASKATCHEWAN RIVER ABOVE	SAMPLE DATE MST D M Y HR	22 05 79 1300 04 06 79 1200 18 06 79 1130 04 07 79 1145 17 07 79 1545	31 07 79 0630 18 09 79 0615 01 10 79 1700 17 10 79 1400 06 11 79 0800	26 11 79 1400 14 01 80 1400 04 02 80 1435 25 02 80 1445 17 03 80 1600	31 03 80 1535 14 04 80 1335 28 04 80 1815 12 05 80 1820 26 05 80 1855	09 06 80 1600 23 06 80 1815 07 07 80 1900 21 07 80 1730 05 08 80 1830	18 08 80 1630 02 09 80 1630 15 09 80 1600 29 09 80 1700 14 10 80 1630	29 10 80 1700 10 11 80 1300 24 11 80 1600 12 01 81 1500 02 02 81 1600

.048

003 300 052 002

642. 426. 362. 187.

0426 0426 0426 0426

21 14 01 13

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 12 519894E 5543261N PR 0 LONG. 110D 43M 20S MEDICINE HAT 2M 365 STATION 00AT05AK2080 LAT. 50D SOUTH SASKATCHEWAN RIVER ABOVE

54601L DISSOLVED BIOLOGICALLY AVAILABLE	HUSPHURUS MG/L	.056	.054	100.	.001	
54611L PARTICULATE BIOLOSICALLY AVALLABLE	MG/L	.510	900.	.125	.008	
54101L FILTERED ALGAL GRCWTH FOTENTIAL	SELENASIRUM CELLS/11L	47.	112.	17.	'n	ů,
3 6 7	ID	0426	0426	0426	0456	
SAMPLE DATE	M Y HR	1720	1630	1800	1630	1850
<u>ٿ</u> ۾	Z ≻	81	05 81	81	81	81
SAME	Σ	04	05	0.5	07	60
Ų,	O	27	11	25	12	28

54200N

PR 3 UTM 12 524450E 5554					
LONG. 110D 39M 28S BELOW MEDICINE HAT	54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSFHORUS MG/L			.158	.087 .071 .057 .024 .011
8M 30S LONG. BELOW	54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	200.	.005 .010 .011	.009 .021 .023 .023	.030 .079 .136 .060 .094
LAT. 50D IVER	54101L FILTERED ALGAL GROWTH FOTEHTIAL SUBH SELENASTRUM ID CELLS/ML	97. 126. 21. 10.	13. 2. 160. 32. 160.	532. 1930. 1790. 1530.	683. 923. 314. 155. 89.
AK2087 EWAN R	SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426
STATION 00AT05AK2087 SOUTH SASKATCHEWAN RIVER	SAMPLE DATE MST D M Y HR	22 05 79 1050 04 06 79 1400 18 06 79 1330 04 07 79 1400 17 07 79 1015	31 07 79 0835 17 09 79 0530 01 10 79 1525 17 10 79 1220 05 11 79 1600	26 11 79 1300 14 01 80 1230 04 02 80 1400 25 02 80 1415 17 03 80 1520	31 03 80 1420 14 04 80 1445 28 04 80 1330 12 05 80 1610 26 05 80 1630 09 06 80 1545

NAQUADAT DETAILED REPORT AGP FBAP AND DBAP

524450E 5554200N UTM 12 m PR LONG. 110D 39M 28S BELOW MEDICINE HAT 8M 30S LAT. 50D SOUTH SASKATCHEWAN RIVER STATICH 00AT05AK2087

BIOLCGICALLY DISSOLVED AVAILABLE PHOSPHORUS 54601L .026 .002 .033 .042 .062 .062 .143 .064 .072 .059 .001 001 001 001 005 020 002 MG/L PARTICULATE BIOLOGICALLY AVAILABLE PHOSFHORUS 54611L .031 .011 .003 .015 .005 .017 .006 .015 .003 .004 900 023 .030 .250 MG/L ALGAL GROWTH SELENASTRUM FOTENTIAL FILTERED CELLS/11L 54101L 216. 1. 1. 2. 173. 502. 502. 841. 687. 448. 312. 323. 11. 194. 27. 2. 794. SUBM 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 0426 GI 1600 1600 1545 1515 1500 1500 1450 1410 1500 1600 1700 1600 1430 1330 1915 1440 1445 1440 0930 SAMPLE DATE H MST 80 80 80 80 80 80 80 81 81 81 81 81 81 81 81 \succ 81 23 06 07 07 21 07 05 08 18 08 02 09 15 09 29 09 14 10 29 10 10 11 24 11 12 01 02 02 22 02 25 05 15 06 27 07 08 09 03 04 04 04 Σ 14 01 13 27 Ω

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

STATION 00AT05AK2090 LAT. 50D 38M 0S LONG. 110D 12M 0S PR 3 UTM 12 556600E 5609150N SOUTH SASKATCHEMAN RIVER

000	229 229 02 02 111 111 02	.001 .003 .003 .002 .001 .005 .035 .034 .038
ri ri		
.0031 .0054 .0054 .0059 .0059	.009 .049 .049 .047 .047 .060	.003 .002 .003 .007 .010 .010 .005 .006
60 67 7 7 1630 916 916	703 224 136 136 111 1145 135 135 135 135 135 135 135 135 135 13	26. 26. 11. 12. 42. 247. 393. 1012. 372. 439.
22222 2222	99999 99999	2222 2222 2222
44444 44444	000000000000000000000000000000000000000	0426 0426 0426 0426 0426 0426 0426 0426
1540 1315 1140 0730 1300 1100 1120 1120	1130 1200 1200 1200 1200 1300 1300	1210 1215 1215 1215 1200 1200 1200 1200
		880 80 80 80 80 81 81 81 81
		009 009 009 001 001 005 005 005
	79 1540 0426 30003 79 1315 0426 6004 79 130 0426 5004 79 0730 0426 1002 79 1300 0426 7009 79 1100 0426 60006 80 1045 0426 672031 80 1120 0426 1530008 80 1120 0426 1330008 80 1120 0426 1330035	79 1540 0426 3. .003 79 1315 0426 6. .004 79 1316 0426 1. .005 79 130 0426 1. .002 79 130 0426 7. .009 79 1100 0426 672. .009 80 120 0426 672. .031 80 120 0426 1630. .006 80 120 0426 1330. .035 80 1120 0426 1330. .049 80 1120 0426 134. .049 80 120 0426 136. .049 80 120 0426 136. .049 80 120 0426 136. .049 80 120 0426 136. .049 80 120 0426 136. .049 80 120 0426 136. .049 80 120 0426 136. .049 80 120 0426 136. .044 80 130 0426 220. .044 80 130 0426 220. .018 80 120 0426 220. .018

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 12 556600E 5609150N PR 3 STATION 00AT05AK2090 LAT. 50D 38M 0S LONG. 110D 12M 0S F SOUTH SASKATCHEMAN RIVER

54601L DISSCLVED BIOLOGICALLY AVAILABLE	PHOSFHORUS MG/L	.013	.003	.001
54611L PARTICULATE BIOLOGICALLY AVAILABLE	PHOSPHORUS MG/L	.025	.357	.012
54101L FILTERED ALGAL GROWTH POTENTIAL	SE		20.	พ์พ์
	SUBM	0426	0456	0426
SAMPLE DATE	MST HR	04 81 1300	1200	81 1400 81 1530
ш	MST Y	81	81	81
SAMP	Σ	90	9	00

0

27 111 25 12 28 UTM 11 695350E 5664400N PR 3 05 LONG. 114D 12M 36S STATION 00AT05BH2105 LAT. 51D 6H BOW RIVER AT 85ST. BRIDGE CALGARY

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L				.005
54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	.005	.001	000. 0003 0003 0001	.002 .002 .001 .001
54101L FILTERED ALGAL GROWTH FOTENTIAL SELENASTRUM	34 4 9 6.	26. 13. 13.	11. 9. 12. 1.	19. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426
SAMPLE DATE HST M Y HR	1015 0840 0800 0855 1230	1300 0720 1145 1235 1130	1500 1300 1645 1430 1145	1215 0830 1545 1140 1230
PLE HST	79 79 79 79 79	79 79 79 79 79	79 79 80 80	8 80
SAM D M	4 05 8 05 1 06 5 06 9 07	3 07 5 08 0 08 3 09 8 10	8 10 8 11 9 12 7 01 8 01	18 02 10 03 24 03 08 04 21 04 05 05
_	14 28 11 25 09	23 23 23 08	28 18 09 07 28	18 10 24 08 08 21 21

UTM 11 695350E 5664400N PR 3 STATION 00AT05BH2105 LAT. 51D 6M 0S LONG. 114D 12M 36S BOW RIVER AT 85ST. BRIDGE CALGARY

54601L DISSOLVED BIOLCSICALLY AVAILABLE PHOSFHORUS MG/L		.001	100. .002 .002 .003	.004 .001 .003 .001	.000 .001 .001 .002	
54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	.001	.001 .001 .001 .001	.001 .001 .001	.0001.003	.000 .001 .003 .001	
54101L FILTERED ALGAL GRCWTH FOTENTIAL SELEMASTRUM CELLS/ML		44%44	ที่ณีณีณีค่	N 0 0 0 0 0 0	, v, t, v, v	လွှင်းတို့ကို
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	
SAMPLE DATE MST M Y HR	0600 1245 0715 0700 1400	0700 0730 0700 0800 0730	0700 0830 0915 0800 1320	0800 0800 0800 0800	0800 0800 0915 0830 0800	1015 1030 1155 1525 1400
MPLE NST	8 80 8 80 7 80 7 80	7 80 8 80 8 80 9 80 9 80	0 80 0 80 1 80 1 80 2 80	8 81 81 81 81 81 81 81 81 81 81 81 81 81	8 81	7 81 7 81 9 81 9 81
SAN	20 05 02 06 16 06 01 07 14 07	28 07 11 08 25 08 08 09 22 09	90800	05 01 26 01 16 02 09 03 06 04	21 04 04 05 19 05 09 06 30 06	20 07 20 07 24 08 21 09 15 10
	нонои	01000	0 11 0 11 0	00100	20100	20001

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 11 679350E 5640800N PR 3 STATION 00ATO5BM2161 LAT. 50D 53M 34S LONG. 114D 27M 0S BOW RIVER AT HIGHWAY 22X, CALGARY

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSFHORUS MG/L				.212 .237 .218	.159 .005 .040 .001	.194 .093 .108 .141	.210 .025 .207 .165	.211 .179 .214
54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	.018	.004 .014 .031	.046 .040 .050 .077	.024	.026 .034 .008	.013 .018 .021 .023	.008 .017 .013 .018	.033
54101L FILTERED ALGAL GROWTH POTENTIAL SELEMASTRUM CELLS/ML	422. 420. 816. 785.	551. 736. 583. 1265. 1818.	1540. 1660. 2190. 2760. 2400.	2800. 1210. 470. 826.	725. 300. 751. 5.	640. 524. 646. 664.	942. 772. 765. 512. 669.	867. 659. 644. 779.
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426						
SAMPLE DATE MST D M Y HR	14 05 79 1430 28 05 79 1215 11 06 79 1050 25 06 79 1110 09 07 79 0950	23 07 79 0925 05 08 79 1345 20 08 79 0945 23 09 79 1450 08 10 79 1330	28 10 79 1700 18 11 79 1530 09 12 79 1530 07 01 80 1315 28 01 80 0945	18 02 80 1000 10 03 80 1140 24 03 80 1400 08 04 80 1000 21 04 80 1000	05 05 80 0940 20 05 80 1000 02 06 80 0700 16 06 80 1000 01 07 80 1000	14 07 80 1130 28 07 80 1030 11 08 80 0950 25 08 80 1000 08 09 80 1000	22 09 80 1000 06 10 80 1000 20 10 80 1100 03 11 80 1400 18 11 80 1000	08 12 80 1130 05 01 81 1214 26 01 81 1230 16 02 81 1200

AGP PBAP AND DBAP

UTM 11 679350E 5640800N PR 3 STATION OGATOSEM2161 LAT. SOD 53H 34S LONG. 114D 27H OS BOW RIVER AT HIGHMAY 22X, CALGARY

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSFHORUS MG/L	.309	.220	.042	
54611L PARTICULATE BIOLOGICALLY AVAILABLE FHOSFHORUS MG/L	.033	.003 .021 .036	.259 .221 .005	
54101L FILTERED ALGAL GRCWTH FOTENTIAL SELEMASTRUM CELLS/ML	589.	905. 784. 1016.	482. 418. 526. 86.	518. 694. 1308.
SUBM	0426	0426 0426 0426	0426 0426 0426	
SAMPLE DATE MST M Y HR	1015	1430 1300 1230	1450 1030 1400 1515	1550 1105 1415
LE MST	81	81	81 81 81	81
A MP		004	000 000	009
S	00	06 21 04	19 30 20	24

PR 3 UTM 08 611800E 5632150N 49M 56S 10NG, 133D 24M 46S

80																				
0TM 08																				
m																				
PR #24																				
LONG. 133D 24M 46S UPSTREAM OF HIGHWAY	54601L	DISSOLVED	BIOLOGICALLY	AVAILABLE	PHOSPHORUS	MG/L														
STATION 00A105BH2215 LAT. 50D 49M 56S LONG. 133D 24M 46S PR 3 BON RIVER BELOW CARSELAND WEIR UPSTREAM OF HIGHWAY #24	54611L	PARTICULATE	BIOLOGICALLY	AVAILABLE	PHOSPHORUS	MG/L				.011	÷00°			.003	600.	600.	.014	.020	.013	.022
STATION OOATOSBM2215 LAT. 500 BOW RIVER BELOW CARSELAND WEIR	54101L	FILTERED	ALGAL GROWTH	POTENTIAL	SUBM SELENASTRUM	CELLS/ML	294.	390.	338.	380.	323.	, co	. 982	277.	390.	518.	776.	1237.	1060.	1030.
SM2215					SUBM	먑	0426	0456	0456	0456	0456		9250	0456	0456	0456	0456	0456	0426	0456
ON OOATOSE IVER BELOG				SAMPLE DATE	MST	M Y HR	79 0945	4	4	4	79 0730		40/0 6/	79 1040	79 0830	79 0645	79 0645	79 0800	19 11 79 0730	79 0800
STATI BOW R				SAM		Ω			12 06			,	23 07	05 08	21 08	24 09	01 60	29 10	19 11	10 12

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 08 611800E 5632150N M LONG. 133D 24M 46S PR UPSTREAM OF HIGHWAY #24 LAT. 50D 49H 56S STATION ODATOSBH2215 LAT. SO BOW RIVER BELOW CARSELAND WEIR

BIOLOGICALLY AVAILABLE DISSOLVED PHOSPHORUS 54601L .237 .203 .112 .112 .027 .012 .039 .026 .108 130 .260 .179 .185 .198 .224 .110 .024 .130 .141 113 MG/L PARTICULATE BIOLOGICALLY PHOSPHORUS AVAILABLE 54611L .030 .014 .025 046 027 018 063 028 020 053 013 610 007 017 015 004 008 006 003 000 007 013 900 007 MG/L ALGAL GROWTH SELENASTRUM CELLS/ML POTENTIAL FILTERED 54101L 2540. 2540. 2570. 999. 480. 402. 470. 266. 368. 433. 469. 541. 541. 903. 558. 686. 979. 658. 502. 902. 309. 247. 57. 299. 839. 1250. 953. 491. 988. 1100. 591. 906 755. SUBM 0426 Ωī 1130 0830 1000 0830 0830 1320 0900 1400 0830 1245 1145 1230 1220 1200 1245 1216 0060 1100 1000 1125 1145 1015 1030 1225 1245 1400 0920 1750 SAMPLE DATE 품 MST 80 80 80 80 80 80 80 81 81 81 81 80 80 80 81 81 > 81 81 81 81 81 03 11 18 11 08 12 05 01 26 01 08 Σ 01 02 03 03 06 07 07 009 009 110 003 003 004 004 004 05 05 06 06 04 09 30 20 ۵ 07 28 10 10 08 21 05 21 21 03 16 01 14 28 25 22 20 20 20 16 09 20 06 21 24 21 21 14

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

1AT 500 44M 525 10NG. 1120 31M 275 PR 3 UTM 12 392500E 5622650N

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L				.183	.194 .125 .104 .082	.028 .028 .049 .036	.128 .060 .068 .055	.100
54611L PARTICULATE BIOLOSICALLY AVAILABLE PHOSFHORUS MS/L	800.	.0009	.010	.011 .024 .027 .024	.081 .055 .012	.027 .026 .007 .012	.012 .010 .009 .006	.052 .023 .031
54101L FILTERED ALGAL GROWTH FOTENTIAL SELENASTRUM CELLS/ML	274. 329. 262. 113. 91.	44. 278. 183. 169. 147.	38. 482. 853. 935. 872.	1200. 1990. 2210. 2224. 993.	1010. 592. 271. 59.	451. 284. 327. 363. 263.	261. 374. 199. 501. 218.	555. 462. 815.
SUBM	0426 0426 0426 0426 0426	0426 0426 0426						
SAMPLE DATE MST M Y HR	1300 0945 0845 1015 0950	0820 0750 0845 1045 0810	1020 1020 1020 1100	1200 0930 0830 0840 0830	1415 0830 0900 1710 1230	1130 0910 0900 0500 1100	0915 1115 1000 1000 1000	1100
MPLE I	5 79 6 79 6 79 6 79	7 79 7 79 7 79 7 79 8 79	8 79 9 79 0 79 1 79	2 79 1 80 1 80 2 80 3 80	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	5 80 7 80 7 80 7 80	9 80	0 80 1 80
SAR	15 05 29 05 04 06 12 06 26 06	04 07 10 07 24 07 30 07 06 08	21 08 24 09 09 10 29 10 19 11	10 12 08 01 29 01 19 02 11 03	25 03 09 04 22 04 05 05 21 05	03 06 17 06 02 07 15 07 29 07	12 08 26 03 09 09 23 09 07 10	21 10 04 11 18 11

UTM 12 392500E 5622650N PR 3 STATION 00AT05BH2240 LAT. 50D 44M 52S LONG. 112D 31M 27S BOW RIVER BELOW BASSANO DAM

				54IUIL FIITEPEN	54611L DARTICH ATE	54501L n15501VFD	
				ALGAL GROWTH	BIOLOGICALLY	BIOLCGICALLY	
SAMP	LE	AMPLE DATE		FOTENTIAL	AVAILABLE	AVAILABLE	
	1151	les	SUBM	SELENASTRUM	FHOSPHORUS	PHOSPHORUS	
Σ	>	至	OI	CELLS/ML	MG/L	MG/L	
10	81	0060	0426	530.	700.	.176	
01	81	1000	0456	.006	.025	.136	
02	81	0060	0426	1212.	.020	.168	
03	81	0800	0456	614.	.021	.177	
03	81	1213	0426	648.	.037	.179	
3	5		70.70	1	600	L	
Š	10	0077	0450	.0/6	con.	621.	
90	81	0800	0426	454.	.014	.141	
05	81	0800	0456	1304.	950.	.086	
05	81	0060	0426	227.	.020	.012	
90	81	1300	0426	213.	.025	.034	
07	81	0820	0456	93.	.001	.001	
07	81	1105		2.			
08	81	1035		182.			
60	81	1055		391.			
10	81	1100		903.			

Ω

 UTM 12 413200E 5587150N PR 3 STATION 00AT05BN2245 LAT. 50D 25M 55S LONG. 112D 13M 19S BOW RIVER AT BOW CITY BRIBGE

54601L DISSOLVED BIOLOGICALLY	AVAILABLE	MS/L									.204	061.	.122
54611L PARTICULATE BIOLOGICALLY	AVAILABLE	MG/L	.011	.037	.012	.014	.013	.015	.022	.019	.041		560.
54101L FILTERED ALGAL GROWTH		CELLS/ML	27.	41.	565.	833.	1390.	1940.	2260.	2200.	1240.		1100.
	2	ID	0426	0426	0426	0426	0426	0426	0426	0456	0456	0456	0426
	SAMPLE DATE	HR	1310	1400	1400	1230	1330	1130	1040	1040	1030	0915	80 1025
	LE	<u>c</u> ≻	79	4	4	4	4	80	80	80	80	80	80
	AMP	Σ	60	10	10	11	12	0.1	10	02	03	03	50
	S	Q	24		29	19	10	90	59	19	TT.	25	60

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 12 413200E 5587150N PR 3 STATION OOATOSBN2245 LAT. SOD 25M 55S LONG. 112D 13M 19S BOW RIVER AT BCW CITY BRIEGE

54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSPHORUS MS/L	.082 .030 .015 .031	.031 .002 .008 .003	.002 .014 .007 .120	.076 .168 .139 .162 .166 .173 .173 .173	.025 .018
54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	.085 .012 .017	.004 .004 .015 .015	.003 .011 .010 .039	.031 .020 .007 .026 .023 .178 .013 .009	. 0064
54101L FILTERED ALGAL GROWTH POTENTIAL SELEHASTRUM CELLS/ML	753. 91. 9. 393. 280.	213. 9. 15. 46.	3. 118. 57. 754. 576.	650. 1010. 547. 972. 1337. 1003. 768. 593. 366.	364. 172. 172. 140. 177.
SUBM	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426 0426 0426 0426	0426 0426 0426
SAMPLE DATE MST D M Y HR	22 04 80 1130 06 05 80 1910 21 05 80 1600 03 06 80 1500 17 06 80 1230	02 07 80 1230 15 07 80 1300 29 07 80 1310 12 08 80 1345 26 08 80 1315	09 09 80 1230 23 09 80 1145 07 10 80 1215 21 10 80 1330 04 11 80 1330	19 11 80 1200 09 12 80 1100 06 01 81 1050 27 01 81 1200 17 02 81 1100 21 03 81 1420 07 04 81 1330 22 04 81 1000 05 05 91 1045	20 05 81 1130 07 06 81 1115 01 07 81 1030 21 07 81 1440 25 08 81 1500 22 09 81 1300

NAQUADAT DETAILED REPORT AGR PBAR AND DBAP

PR 3 UTM 12 458400E 5543500N STATION ODATOSBN2270 LAT. 50D 2M 39S LONG. 111D 34M 52S BOW RIVER AT RONALANF BDIDGE

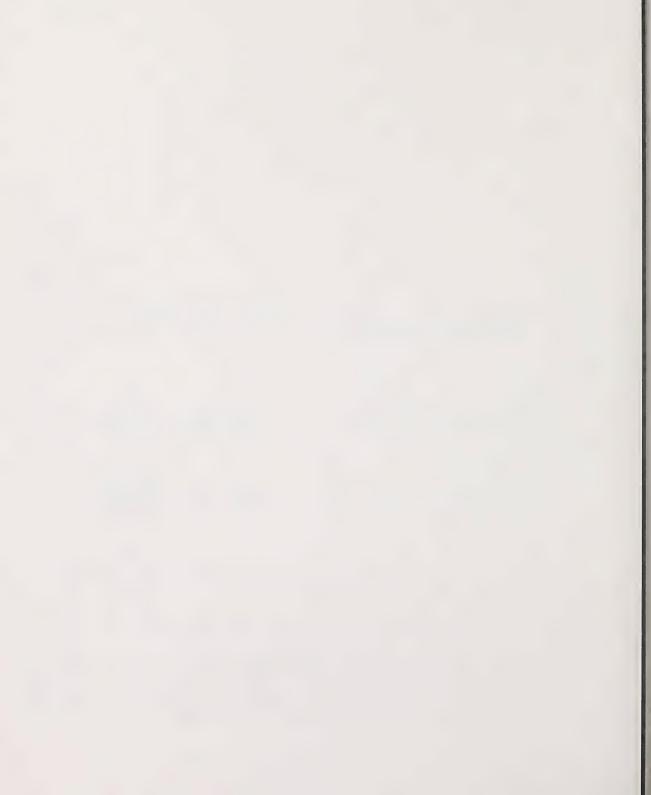
55435001									
458400E									
12									
<u> </u>									
m ev									
<u>r</u>									
111D 34M 52S	54601L DISSOLVED BIOLOGICALLY AVAILABLE PHOSPHORUS HG/L				.170 .178 .102	.033 .005 .020 .027	.007 .008 .005 .003	.002 .003 .065 .087	.147 .184 .043
2M 39S LONG.	54611L PARTICULATE BIOLOGICALLY AVAILABLE PHOSPHORUS MG/L	.013	.003 .005 .007	.010 .024 .012 .026	.042 .046 .140	.032 .003 .068 .049	.002	.000 .006 .054 .026	.006
LAT. 50D E BRIDGE	54101L FILTERED ALGAL GROWTH FOTENTIAL SELEMASTRUM CELLS/ML	10. 270. 145. 83.	20 % m % 0.	28. 812. 1360. 1810. 2110.	1980. 1250. 941.	153. 10. 346. 307. 50.	7. 19. 19. 18.	12. 22. 614. 444. 839.	1020. 1104. 1234. 617.
M2270 MALAN	SUBM	0426 0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426 0426	0426 0426 0426 0426
STATION ODATO5BM2270 LAT. Bow River at Ronalane Bridge	SAMPLE DATE MST D M Y HR	15 05 79 1635 29 05 79 1226 12 06 79 1305 26 06 79 1210 10 07 79 1040	24 07 79 1120 06 08 79 1110 21 08 79 1315 24 09 79 0930 09 10 79 1630	30 10 79 1030 19 11 79 1430 10 12 79 1500 08 01 80 1330 29 01 80 1245	19 02 80 1230 11 03 80 1245 25 03 80 1050 09 04 80 1250 22 04 80 1600	06 05 80 1110 22 05 80 0830 04 06 80 0830 18 06 80 1045 03 07 80 0800	16 07 80 0945 30 07 80 1015 13 08 80 0900 27 08 80 0915 10 09 80 0830	24 09 80 0930 08 10 80 0830 22 10 80 0940 04 11 80 1630 19 11 80 0930	09 12 80 1430 27 01 81 1405 17 02 81 1500 10 03 81 1400

NAQUADAT DETAILED REPORT AGP PBAP AND DBAP

UTM 12 458400E 5543500N PR 3 STATION 00ATO5BN2270 LAT. 50D 2M 39S LONG. 111D 34H 52S BOW RIVER AT RONALANE BRIDGE

54601L DISSOLVED BIOLOGICALLY	AVAILABLE	PHOSPHORUS	HG/L	.115	.116	÷60°	.028	.031	.017	.002					
54611L PARTICULATE BIOLOGICALLY	AVAILABLE	PHOSPHORUS	MG/L	.024	.010	.003	.017	990.	.042	.022					
54101L FILTERED ALGAL GROWTH	FOTENTIAL	SELENASTRUM	CELLS/ML	894.	754.	261.	33.	356.	191.	2.	80.	18.	28.	10.	34.
		SUBM	ID	0426	0426	0426	0426	0426	0426	0456					
	SAMPLE DATE		HR	0920	1530	1240	1245	1330	0915	1230	1630	1255	1615	1330	1535
	H	HST	>-	81	81	81	81	81	81	81	81	81	81	81	81
	ANA		Σ	03	50	04	0.5	0.5	90	07	07	08	60		10
	(I)		۵	22	07	22	0.5	20	20	10	21	25	22	14	14

B-3 NAQUADAT printout of relevant Environment Canada data collected during the study period



PAGE 28

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROSEN FORMS UTH 11 677000E 5672000N FR 55 STATION 00AL05BH0017 LAT. 51D 10M 25S LONG. 114D 28M 05 BOW RIVER AT COCHRANE, ALBERTA

07506L NITROGEN TOTAL AMHONIA N MG/L			ij			۲.1	:::	L.1
07110D NITROGEN DISSOLVED NO3 & NO2 N MG/L	.01 10L .03 10L .03 10L .03 10L	.01 10L .04 10L .10 10L .10 10L .08 10L	.09 10L .03 10F .06 10F .06 10F	.02 10F .01 10F .02 10F .04 10F	.08 10F .01 10F .02 10F L.01 10F	.06 10F .06 10F .05 10F .05 10F	.03 10F .05 10F .08 10F .10 10F	.06 10F
07651L NITROGEN DISSOLVED N HG/L	.18 .00 .08 .00		21. 21. 41. 01.	.12		0.000.000	.08	ET:
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 56L L.003 56L L.003 56L							
15356F PHOSPHORUS DISSOLVED INORG. PO4 P								
15103D PHOSPHORUS DISSOLVED P MG/L	1.003 03L 1.003 03L 1.003 03L 1.003 03L	750 2007 750 600. 750 600. 750 600. 750 600. 750 600.	L.003 03L .007 03F .003 03F	L.003 03F L.003 03F L.003 03F .003 03F	.003 03F L.003 03F L.003 03F L.003 03F	L.003 03F L.003 03F L.003 03F L.003 03F	L.003 03F .003 03F L.003 03F L.003 03F	L.003 03F
15301L PHOSPHORUS TOTAL INORGANIC P								
15406L PHOSFHOROUS TOTAL PHOSFHATE P MG/L	L.003 .008 .006 .014 L.003	.006 L.003 .003 L.003	L.003 .005 .010	.004 L.003 L.003	L.003 L.003 L.003	.007 .007 .010 .004 L.003	.004 .008 L.003 L.003	110.
SUBM	0479 0479 0479 0479	6440						
SAMPLE DATE HST D M Y HR	09 05 79 0825 06 06 79 1540 25 07 79 0740 30 08 79 1100 12 09 79 0710	11 10 79 0855 15 11 79 0830 10 12 79 1045 16 01 80 1400 06 02 80 0950	05 03 80 0910 23 04 80 1055 14 05 80 0915 18 06 80 0915 29 07 80 1130	20 08 80 1015 17 09 80 1015 08 10 80 0815 12 11 80 1145 15 12 80 1135	14 01 81 1055 25 02 81 1100 25 03 81 1050 23 04 81 1040 12 05 81 0930	13 05 81 0930 17 06 81 0945 08 07 81 0945 12 08 81 0900 16 09 81 0945	07 10 81 0850 04 11 81 0930 09 12 81 1010 13 01 82 1300 29 03 82 1145	26 04 82 0740

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PAGE 29

UTM 11 677000E 5672000N ın ద 0.8 STATION 00ALOSEH0017 LAT. SID 10M 25S LONG. 114D 28H BOW RIVER AT COCHRANE, ALBERTA

06104L CARBON	DISSOLVED ORGANIC C MG/L	4.9.1.1.1	jiiiii	L1. 2. 04F 2. 04F 1. 04F L1. 04F	1. 04F L1. 04F L1. 04F	L1. 04F L1. 04F 1.		44044	m
06902L CARBON	ORGANIC PARTICULATE C MG/L	. 22 . 25 . 23 . 16	.18 .15 .17	. 59	. 23 . 10 . 15 . 15	. 1. 2. 2. 1. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	44. 3.6. 1.18 1.2.	.16 .24 .09 .10	.35
07902L NITROGEN	PARTICUL. N MG/L	. 004 . 005 . 002 . 033	. 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0	0.00 0.11 0.00 4.00 4.00 4.00	. 0.0 . 0.0 . 0.0 . 0.0	. 004 . 005 L. 01	. 05 . 05 . 05 L. 01	L:01 100 100 100 100 100 100 100 100 100	90.
10501L RESIDUE	FIXED NONFILTR. MG/L				નં				
10401L RESIDUE	NONFILIR. MG/L	2. 21. 11.	-3333	3. 11. 2.	ĸ.4.1.1.e.		11.7.7.6	::::::::::::::::::::::::::::::::::::::	'n
02073L TURBIDITY	טדנ	นพฤพฤ พี่ที่จำจำ	 תיקינים תיקינים	6	5	0.0000	0.0.4 % H	27 21 10	2.0
0 1	OF WATER DEG.C.	5. 61S 11.0 61S 13.5 61S 16. 61S	8. 615 1.5 615 1.5 615 1.5	1.5 6.5 10.0 11.0	13.0 8.0 7.5 .5	0. 1. 5. 7. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 7. 0. 0. 7. 0. 0. 7. 0. 0. 7. 0. 0. 7. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	7.0 9.5 12.0 14.0	3.0 3.0 1.0 2.0	ญ้
2 CHAR	SUBM	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479	6250
DOW RIVER AL COCHRAME.	SAMPLE DATE MST D M Y HR	09 05 79 0825 06 06 79 1540 25 07 79 0740 30 08 79 1100 12 09 79 0710	11 10 79 0855 15 11 79 0830 10 12 79 1045 16 01 80 1400 06 02 80 0950	05 03 80 0910 23 04 80 1055 14 05 80 0915 18 06 80 0915 29 07 80 1130	20 08 80 1015 17 09 80 1015 08 10 80 0815 12 11 80 1145 15 12 80 1135	14 01 81 1055 25 02 81 1100 25 03 81 1050 23 04 81 1040 12 05 81 0930	13 05 81 0930 17 06 81 0945 08 07 81 0945 12 08 81 0900 16 09 81 0945	07 10 81 0850 04 11 81 0930 09 12 81 1010 13 01 82 1300 29 03 82 1145	26 04 82 0740

PAGE 30

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 11 677000E 5672000N PR 5 STATION 00AL05BH0017 LAT. 51D 10M 25S LONG. 114D 28M 0S BOW RIVER AT COCHRAME, ALBERTA

14105L SILICA REACTIVE SIO2 MG/L	44 W W V	ини гиео. гиео.	4 m m m m 8 k 4 6 6	พพพพพ ซ่างกับ พักษณ์	8 0 0 0 0 M	44 W W W W		
17206L CHLORIDE DISSOLVED CL MG/L	0.1.0		W 4 8 V . 0	00.10	0 0 0 0 0 m	E 1 6 6 6 6	មស្ដមម <i>ប</i> ភភ្បំសំលំ ភ	
02041L SPECIFIC CONDUCT. US/CM	406. 306. 227. 284. 286.	320. 338. 390. 358.	405. 345. 268. 269. 277.	291. 311. 322. 335.	339. 348. 349. 346.	335. 298. 271. 275. 294.	328. 347. 346. 341. 318.	. 430
10151L ALKALINITY PHENOL PHTHALEIN CACO3	0.0.4.0.	00000	0	00000	0.00 °C.		00000	>
10101L ALKALINITY TOTAL CACO3 MG/L	148. 06L 117. 06L 91. 06L 100. 06L	120. 06L 120. 06L 114. 06L 135. 06L	138. 06L 130. 102. 103.	111. 115. 122. 125. 130.	124. 125. 121. 124. 129.	129. 118. 109. 110.	131. 136. 143. 137. 130.	* CC T
06152F CARBON DISSOLVED INORGANIC C MG/L	41. 52L 32. 52L 22. 52L 24. 52L 23. 52L	26. 52L 28. 52L 32. 52L 26. 52L 28. 52L	25. 52L					
10301L PH PH UNITS	8 8 8 8 8 5 4 5 4 5	8 8 8 9 7 7 7 8 9 8 9 9 9 9 9 9 9 9 9 9	00000 ១៧២១៤	00000 4 11 11 11 11	00000 nudaio	00000	\$ \$ \$ \$ \$ \$ \$ \$ \$	1.0
SUBM	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	6 / 4 / 9
SAMPLE DATE MST D M Y HR	09 05 79 0825 06 06 79 1540 25 07 79 0740 30 08 79 1100 12 09 79 0710	11 10 79 0855 15 11 79 0830 10 12 79 1045 16 01 80 1400 06 02 80 0950	05 03 80 0910 23 04 80 1055 14 05 80 0915 18 06 80 0915 29 07 80 1130	20 08 80 1015 17 09 80 1015 08 10 80 0815 12 11 80 1145 15 12 80 1135	14 01 81 1055 25 02 81 1100 25 03 81 1050 23 04 81 1040 12 05 81 0930	13 05 81 0930 17 06 81 0945 08 07 81 0945 12 08 81 0900 16 09 81 0945	07 10 81 0850 04 11 81 0930 09 12 81 1010 13 01 82 1300 29 03 82 1145	0+/0 70 +0

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 457700E 5543700N PR 4 2M 48S LONG. 111D 35H 27S STATION OOALOSENOOOI LAT. 50D BOW RIVER HEAR MOUTH, ALBERTA

07506L NITROGEN TOTAL AMMONIA N		L.1 L.1 .2	4.		64 i i i i	11	11.1.6	à
07110D NITROGEN DISSOLVED NO3 & NO2 N MG/L	.08 10L .20 10L .01 10L L.01 10L	.47 10L 1.1 10L 1.5 10L 1.2 10L 1.3 10L	1.4 10L .85 10F .28 10F .35 10F L.01 10F	L.01 10F L.01 10F .88 10F .96 10F 1.30 10F	.92 10F 2.00 10F 1.10 10F .70 10F	.26 10F .05 10F .09 10F L.01 10F	1.40 10F 1.20 10F 1.30 10F .66 10F 1.70 10F	.80 10F
07651L NITROGEN DISSOLVED N MG/L	. 331 . 339 . 311 . 352	.73 1.7 2.4 1.8	1.9 1.30 .29 .51	.24 .30 1.20 1.20	1.20 2.30 1.30 2.1 51F	.552 .16 .13 .18	1.30 1.70 2.00 1.90	1.00
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	.011 56L .036 56L .005 56L							
15356F PHOSPHORUS DISSOLVED INORG. PO4 P								
15103D PHOSPHORUS DISSOLVED P MG/L	.038 03L .051 03L .028 03L .023 03L	.011 03L .089 03L .14 03L .16 03L	.20 03L .095 03F .035 03F .034 03F	.008 03F .008 03F .056 03F .120 03F	.150 03F .150 03F .120 03F .11 03F	.021 03F .005 03F .015 03F .012 03F	.110 03F .110 03F .170 03F .220 03F	.062 03F
15301L PHOSPHORUS TOTAL INORGANIC P MG/L								
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	. 038 . 036 . 043	.033 .13 .16 .16	.23 .400 .091 .180	.025 .021 .150 .130	.170 .190 .170 .19	. 29 . 037 . 044 . 024	.230 .120 .180 .220	.320
SUBM	0479 0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479 0479	0410
SAMPLE DATE MST D M Y HR	14 05 79 1200 04 06 79 1110 16 07 79 1100 27 08 79 1100 17 09 79 1155	22 10 79 1215 19 11 79 1250 11 12 79 1220 21 01 80 1320 18 02 80 1320	17 03 80 1410 14 04 80 1545 12 05 80 1700 09 06 80 1340 14 07 80 1245	05 08 80 1240 15 09 80 1215 20 10 80 1320 25 11 80 1330 08 12 80 1345	19 01 81 1330 16 02 81 1330 09 03 81 1315 07 04 81 1245 11 05 81 1320	01 06 81 1650 01 07 81 1415 17 08 81 1300 21 09 81 1200 19 10 81 1215	16 11 81 1400 15 12 81 1515 25 01 82 1415 16 02 82 1420 22 03 82 1345	26 04 82 1330

04 16 27 17

11 21 18

14 12 09

20 20 25 03

116 009 07

01 17 21 21

15 25 16 22

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

UTM 12 457700E 5543700N PR STATION 00AL05BN0001 LAT. 50D 2M 48S LONG. 111D 35M 27S BOW RIVER NEAR MOUTH, ALBERTA

06104L CARBON DISSOLVED ORGANIC C MG/L	ம் ம் ம் வ்	ப்ல்ல்ல்ப்	2. 3. 04F 4. 04F	3. 047 6. 047 7. 047 2. 047	1. 04F 2. 04F 2. 04F 3.	ที่ที่ณีที่ทั	ล่ล่ล่ล่ที่ ค่	
06902L CARBON ORGANIC PARTICULATE C MG/L	.40 .58 .26 .24	. 74 . 66 . 30 . 52 . 56	. 69 3.70 72.	3.78 3.00 3.00 2.56	.46 .71 1.50 2.0	7.8 1.40 .78 .41	1.50 .13 .30 .45 .51	
07902L NITROGEN PARTICUL. N MG/L	.10 .12 .13 .08	.15	.11 1.00 .26 .42	.10 .14 .37 .09	.14 .10 .17 .30	.53 .19 .07	L.01 .03 .05 .09	
10501L RESIDUE FIXED NONFILTR.								
10401L RESIDUE NONFILTR.	21. 2.5.	10 4 % % % W	10. 213. 34. 137.	10. 62. 6.	11. 21. 41.	253. 31. 15. 4.	35 2 5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
02073L TURBIDITY JTU	W 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	w 0 w 4 v	7.7 43.0 21.0 58.0 2.9	5.5 3.6 28.0 4.1	5.1 4.7 6.7 20. 3.8	110. 9.6 5.8 2.4 4.8	17.0 1.5 1.9 4.1 2.7	
02061F TEMPERATURE OF WATER DEG.C.	15.5 618 18.5 618 20.5 618 21.5 618 16. 618	4.5 61S 2.5 61S 1.0 61S 1.0 61S	1.5 1.5 1.7 1.7 2.0 2.0	0.00 0.00 0.00 0.00	0 0 N II 1	15.0 18.0 13.0 5.5	н. о. н. м. о. г. о. о. м. о.	
SUBM	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	
SAMPLE DATE MST N M Y HR	05 79 1200 06 79 1110 07 79 1100 08 79 1100	11 79 1215 11 79 1250 12 79 1220 01 80 1320 02 80 1320	7 03 80 1410 1 04 80 1545 2 05 80 1700 3 06 80 1340 4 07 80 1245	08 80 1240 09 80 1215 10 80 1320 11 80 1330 12 80 1345	01 81 1330 02 81 1330 03 81 1315 04 81 1245 05 81 1320	06 81 1650 1 07 81 1415 7 08 81 1300 1 09 81 1200 9 10 81 1215	11 81 1400 12 81 1515 01 82 1415 02 82 1420 03 82 1345 04 82 1330	1

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 457700E 5543700N 4 PR 2M 48S LONG. 111D 35M 27S STATION 00AL05BN0001 LAT. 50D BOW RIVER NEAR MOUTH, ALBERTA

14105L SILICA REACTIVE SIO2 MG/L	1	8 4 . R . 11 0 1 1 2 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8	4401 Ru	2 6 6 6 7 1
17206L CHLORIDE DISSOLVED CL MG/L	びい	800 W H W W W W W W W W W W W W W W W W W	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	7.3 7.3 6.4 10.0 6.4
02041L SPECIFIC CONDUCT. US/CM	376. 350. 351. 351. 365. 449. 424. 503. 494.	466. 343. 343. 374. 358. 397. 405.	420. 430. 417. 417. 436. 306. 318. 430.	417. 442. 442. 422. 413.
10151L ALKALINITY PHENOL PHTHALEIN CACO3	0	00100 6000	0	00000
10101L ALKALINITY TOTAL CACO3 MG/L	111. 06L 109. 06L 70. 06L 102. 06L 106. 06L 130. 06L 130. 06L 135. 06L 125. 06L	122. 06L 110. 128. 118. 102. 104. 118. 134. 145.	141. 143. 123. 135. 120. 122. 118.	141. 168. 164. 160. 140.
06152F CARBON DISSOLVED INORGANIC C MG/L	31. 521 30. 521 19. 521 24. 521 24. 521 28. 521 33. 521 31. 521 23. 521	26, 52L		
10301L FH PH UNITS	0.0000 0.000 v v v v v v v v v v v v v v	> > 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\[\begin{align*} \begin{align*}	8.2 8.1 7.7 7.5 7.9
SUBM	04779 04779 04779 04779 04779 04779 04779	0479 0479 0479 0479 0479 0479 0479	0479 0479 0479 0479 0479 0479 0479	0479 0479 0479 0479 0479
SAMPLE DATE MST D M Y HR	14 05 79 1200 04 06 79 1110 16 07 79 1100 27 08 79 1100 17 09 79 1155 22 10 79 1215 11 12 79 1220 21 01 80 1320 18 02 80 1320	17 03 80 1410 14 04 80 1545 12 05 80 1700 09 06 80 1340 14 07 80 1245 05 08 80 1240 25 10 80 1320 25 11 80 1335 08 12 80 1345	19 01 81 1330 16 02 81 1330 09 03 81 1315 07 04 81 1245 11 05 81 1320 01 06 81 1650 01 07 81 1415 17 09 81 1200 19 10 81 1210	16 11 81 1400 15 12 81 1515 25 01 82 1415 16 02 82 1420 22 03 82 1345 26 04 82 1330

PAGE 1

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 364800E 5507700N PR 4 STATICH 00AL05AD0002 LAT. 49D 42M 30S LONG. 112D 52M 30S OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA

07506L NITROGEN TOTAL AMHONIA N			L.1			L.1		L.1
07110D NITROGEN DISSOLVED NO3 & NO2 N	.03 10L .09 10L L.01 10L .02 10L	.03 10L .05 10L .16 10L .29 10L .23 10L	.15 10L L.01 10F .03 10F .05 10F L.01 10F	.02 10F .03 10F .08 10F	.12 10F .14 10F .03 10F L.01 10F	.11 10F .02 10F L.01 10F L.01 10L	.05 10F .20 10F .27 10F .34 10F	L.01 10F
07651L NITROGEN DISSOLVED N MG/L	. 22 . 22 . 15 . 18	.14 .14 .35 .35	. 43 . 33 . 14 . 14	.15 .13 .16 .36	.18 .23 .11 .14	. 24 . 112 . 13	.15 .26 .42 .41	0.5
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L	.005 56L L.003 56L L.003 56L							
15356F PHOSPHORUS DISSOLVED INDRG. PO4 P								
15103D PHOSPHORUS DISSOLVED P HG/L	L.003 03L .003 03L .012 03L L.003 03L	L.003 03L L.003 03L .006 03L L.003 03L	.025 03L .010 03F .003 03F L.003 03F	.021 03F L.003 03F .019 03F L.003 03F	.006 03F L.003 03F L.003 03F L.003 03F	.003 03F .007 03F .006 03F L.003 03F	.010 03F L.003 03F .004 03F .010 03F	.003 03F
15301L PHOSPHORUS TOTAL INORGANIC P MG/L								
15406L PHOSFHOROUS TOTAL PHOSFHATE P	.13 .21 .021 .070	.015 .006 .003 .007	.030 .031 .026 .058	.031 .019 .051 .024	.034 .004 .005 .011	.16 .036 .007 .009	.043 L.003 .011 .020	.037
SUBH	0479 0479 0479 0479	6440						
SAMPLE DATE MST D M Y HR	15 05 79 1140 05 06 79 1135 17 07 79 1015 28 08 79 1145 18 09 79 1135	23 10 79 1200 20 11 79 1310 12 12 79 1230 22 01 80 1345 19 02 80 1430	19 03 80 1330 15 04 80 1715 13 05 80 1300 10 06 80 1110 15 07 80 1130	06 08 80 1330 16 09 80 1315 21 10 80 1330 26 11 80 1445 09 12 80 1420	20 01 81 1430 17 02 81 1530 10 03 81 1730 08 04 81 1415 13 05 81 0630	02 06 81 1500 02 07 81 1400 18 08 81 1415 22 09 81 1249 21 10 81 0630	17 11 81 1545 06 12 81 1515 26 01 82 1500 17 02 82 1530 23 03 82 1500	27 04 82 1415

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

Ø

PAGE

UTM 12 364800E 5507700N PR 4 STATION 00AL05AD0002 LAT. 49D 42M 30S LONG. 112D 52M 30S OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA

06104L CARBON DISSOLVED ORGANIC C MG/L	ห่ถ่ถ่ถ่ถ่	1,0001	4. 4. 04F 2. 04F 2. 04F	2. 044 2. 044 1. 044 1. 044	1. 04F 2. 04F 3.	ที่ณี่ณี่ณี่	ที่ณีณีณ์ที่ เ	÷
06902L CARBON ORGANIC PARTICULATE C MG/L	.54 4.6 .29 .19	.38	2.2 2.20 44		1.20 .67 .28 .43	4,4 .90 .36 .34 .30	.63 .13 .18 .31 2.20	. 92
07902L NITROGEN PARTICUL. N MG/L	.49 .49 .12 .06	.05	.07 .15 .16 .08	.09 .08 .16 .13 L.01	. 12 . 06 . 06 L. 01			.15
10501L RESIDUE FIXED NONFILTR.								
10401L RESIDUE NONFILTR. MG/L	234. 42. 77. 23.8	10. 10. 2.	9. 13. 27.	12. 22. 43. 27. 6.	57. 25. 12. 4.	248. 41. 4. 4.	14 w w w w w w w w w w w w w w w w w w w	33.
02073L TURBIDITY JTU	888. 588. 39.7. 5.4.	н ы сл 4 ы й й сл й сб й	17. 2.2 12.0 28.0	6.5 11.0 14.0 20.0 4.1	20.0 15.0 3.0 3.7 60.	90.0 7.2 8.8 8.8	31 4 4 2 5 6 8 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	28.0
02061F TEMPERATURE OF WATER DEG.C.	14. 615 15. 615 21.5 615 21. 615 17. 615	5. 61S 1.5 61S 1.0 61S 1.0	.8 13.0 17.0 19.0	18.0 12.0 6.0 1.0	2.0 1.0 6.5 .0	14. 18.0 22.0 12.0 4.0		12.0
SUBM	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	6250
SAHPLE DATE MST D M Y HR	15 05 79 1140 05 06 79 1135 17 07 79 1015 28 08 79 1145 18 09 79 1135	23 10 79 1200 20 11 79 1310 12 12 79 1230 22 01 80 1345 19 02 80 1430	19 03 80 1330 15 04 80 1715 13 05 80 1300 10 06 80 1110 15 07 80 1130	06 08 80 1330 16 09 80 1315 21 10 80 1330 26 11 80 1445 09 12 80 1420	20 01 81 1430 17 02 81 1530 10 03 81 1730 08 04 81 1415 13 05 81 0630	02 06 81 1500 02 07 81 1400 18 08 81 1415 22 09 81 1249 21 10 81 0630	111 81 12 81 01 82 02 82 03 82	27 04 82 1415

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 364800E 5507700N 4 ద STATION 00AL05AD0002 LAT. 49D 42M 30S LONG. 112D 52M 30S OLDMAN RIVER NEAR LETHBRIDGE, ALBERTA

14105L SILICA REACTIVE SIO2 MG/L	4 4 6 4 4 6 4 4 6 4 6 4 6 4 6 4 6 4 6 4	н ч о к о ю о 4 о й	0 mm0	00 N N N N N N N N N N N N N N N N N N	W H W L V V	4 W M H H M M M M M M M M M M M M M M M M	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
17206L CHLORIDE DISSOLVED CL MG/L	u u u s v o c u u s		9 k . 1 4 4 6 8 5	0.0 1.0 1.0 7.0 7.0	2.1.1 2.0.0 1.0.0	00404	1.0.0 E	
02041L SPECIFIC CONDUCT. US/CH	346. 243. 376. 405. 438.	446. 484. 499. 509.	446. 582. 292. 272. 352.	325. 396. 395. 460.	368. 410. 409. 484.	275. 292. 362. 442. 447.	401. 503. 455. 428. 372.)
10151L ALKALINITY FHENOL PHTHALEIN CACO3 MG/L	0. 0.	0.0.00	0.15 0.00.6	4 V 0 0 0 0 0	0.0600	0,000	00000)
10101L ALKALINITY TOTAL CACO3 MG/L	127. 06L 98. 06L 124. 06L 123. 06L 134. 06L	150. 061 159. 061 134. 061 150. 061 134. 061	116. 06L 160. 115. 111.	119. 136. 140. 145.	142. 143. 153. 172.	113. 123. 139. 147.	150. 196. 180. 165. 160.	1
06152F CARBON DISSOLVED INORGANIC C MG/L	33. 52L 28. 52L 28. 52L 28. 52L 30. 52L	31. 521 39. 521 39. 521 41. 521 28. 521	26. 52L					
10301L PH PH UNITS	o o o o o w in d ri d	88877 8888	ស ស ស ស ស ស 4 4 10 10	00000 0400	00000 10000	8 8 8 8 8 8 4 6 4 8	2007700 0)
SUBM	0479 0479 0479 0479							
SAMPLE DATE NST D M Y HR	15 05 79 1140 05 06 79 1135 17 07 79 1015 28 08 79 1145 18 09 79 1135	23 10 79 1200 20 11 79 1310 12 12 79 1230 22 01 80 1345 19 02 80 1430	19 03 80 1330 15 04 80 1715 13 05 80 1300 10 06 80 1110 15 07 80 1130	06 08 80 1330 16 09 80 1315 21 10 80 1330 26 11 80 1445 09 12 80 1420	20 01 81 1430 17 02 81 1530 10 03 81 1730 08 04 81 1415 13 05 81 0630	02 06 81 1500 02 07 81 1400 18 08 81 1415 22 09 81 1249 21 10 81 0630	17 11 81 1545 06 12 81 1515 26 01 82 1500 17 02 82 1530 23 03 82 1500 27 04 82 1415	100

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

UTM 12 422200E 5534600N Ŋ ద LONG. 112D 5M 5S ALBERTA STATION 00AL05AG0001 LAT. 49D 57M 40S OLDMAN RIVER AT HWY 36 NORTH OF TABER,

07506L NITROGEN TOTAL AMMONIA N MG/L	72222	siikak	ú		81111	L.1	::::	۲.1
O7110D NITROGEN DISSOLVED NO3 & NO2 N MS/L	.07 10L .08 10L .01 10L .09 10L L.01 10L	.14 10L .14 10L .31 10L .58 10L .44 10L	.02 10F .13 10F .07 10F L.01 10F	L.01 10F L.01 10F L.01 10F .12 10F	.15 10F .25 10F .06 10F L.01 10F	.12 10F L.01 10L .01 10F L.01 10F	.03 10F .25 10F .49 10F .58 10F	.05 10F
07651L NITROGEN DISSOLVED N MG/L	25. 451. 721. 745. 745.	.48 .38 .79 1.1	.80 .128 .117	. 24 . 20 . 16 . 22 . 55	.35 .50 .15 .19	.24 .10 .18 .21	.15 .44 1.30 1.00	.23
15256F PHOSPHORUS DISSOLVED ORTHO PO4 P	L.003 56L .004 56L L.003 56L							
15356F PHOSPHORUS DISSOLVED INORG, PO4 P								
15103D PHOSPHORUS DISSOLVED P MG/L	.005 03L .006 03L .12 03L .036 03L	.055 03L .057 03L .090 03L .18 03L	.11 03L .100 03F .021 03F .010 03F	.044 03F .031 03F .024 03F .010 03F	.069 03F .051 03F .040 03F .047 03F	.008 03F .004 03L .010 03F .022 03F	.057 03F .055 03F .280 03F .240 03F	.039 03F
15301L PHOSPHORUS TOTAL INORGANIC P MG/L								
15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.14 .14 .024 .095	.065 .059 .11 .20	.13 .150 .092 .038	.071 .050 .039 .038	. 074 . 070 . 072 . 085	. 29 . 045 . 020 . 037	.063 .300 .250	.120
SUBM	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	6440
SAMPLE DATE NST D M Y HR	14 05 79 1000 04 06 79 0945 16 07 79 0940 27 08 79 0950 17 09 79 0950	22 10 79 1050 19 11 79 1135 11 12 79 1100 21 01 80 1200 18 02 80 1210	17 03 80 1245 14 04 80 1400 12 05 80 1210 09 06 80 1200 14 07 80 1100	05 08 80 1040 15 09 80 1010 20 10 80 1030 25 11 80 1140 03 12 80 1115	19 01 81 1115 16 02 81 1130 09 03 81 1130 07 04 81 1100 11 05 81 1115	01 06 81 1430 01 07 81 1100 17 08 81 1045 21 09 81 1015 19 10 81 1015	16 11 81 1200 15 12 81 1310 25 01 82 1215 16 02 82 1245 22 03 82 1200	26 04 82 1130

PAGE 14

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC

PR 5 UTM 12 422200E 5534600N STATION 00AL05AG0001 LAT. 49D 57M 40S LONG. 112D 5M 5S OLDHAN RIVER AT HWY 36 NORTH OF TABER, ALBERTA

06104L CARBON DISSOLVED ORGANIC C MG/L	ที่ที่ที่ท ั้ง		3.04F	3. 04F 2. 04F 2. 04F 2. 04F	2. 04F 4. 04F 3. 04F 3.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	÷
06902L CARBON ORGANIC PARTICULATE C MG/L	3.6 3.6 48 35		.60	1.10 .70 .48 1.00	.55 .56 .74 .78	7.5	.30	1.90
07902L NITROGEN PARTICUL. N MG/L	.36 .34 .47 .10	. 06 . 05 . 07 . 08	. 13 L. 01 . 34 . 27	.16 .16 .03	.17	. 45 . 13 . 09	.11 L.01 .07 L.01	. 34
10501L RESIDUE FIXED NONFILTR.								
10401L RESIDUE NONFILTR. MG/L	148. 207. 5. 11.8		6. 15. 109. 105.	16. 7. 6. 11.	8. 7. 7.	379. 65. 7. 5.	9 1 1 1 3	.04
02073L TURBIDITY JTU	73. 81. 6.2 28.	1.5 2.5 7.5 7.5	5.9 13.0 56.0 46.0 5.0	10.0 5.8 4.4 8.5	25.0 % % % % % % % % % % % % % % % % % % %	140. 29.0 4.3 4.4 5.5	7.00 1.00 1.00 1.00 1.00	18.0
02061F TEMPERATURE OF WATER DEG.C.	13.5 61S 17.5 61S 19.5 61S 20. 61S 16. 61S	4.5 61S 2. 61S 1.0 61S 1.0 5	1.5 14.0 15.0 17.0 20.0	16.0 11.0 8.0 0.5 0.0	1. 1.0. 1.0. 1.0.	16. 18.0 22.0 13.0 8.0		11.5
SUBM	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	0479 0479 0479 0479	6/50
SAMPLE DATE MST D M Y HR	14 05 79 1000 04 06 79 0945 16 07 79 0940 27 08 79 0950 17 09 79 0950	22 10 79 1050 19 11 79 1135 11 12 79 1100 21 01 80 1200 18 02 80 1210	17 03 80 1245 14 04 80 1400 12 05 80 1210 09 06 80 1200 14 07 80 1100	05 08 80 1040 15 09 80 1010 20 10 80 1030 25 11 80 1140 08 12 80 1115	19 01 81 1115 16 02 81 1130 09 03 81 1130 07 04 81 1100 11 05 81 1115	01 06 81 1430 01 07 81 1100 17 08 81 1045 21 09 81 1015 19 10 81 1015	11 81 12 81 01 82 02 82 03 82	26 04 82 1130

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

Ŋ PR 52 5<u>M</u>

PAGE 15

UTM 12 422200E 5534600N LONG. 112D ALBERTA STATION 00AL05AG0001 LAT. 49D 57M 40S OLDMAN RIVER AT HWY 36 NORTH OF TABER,

14105L SILICA REACTIVE SIO2 MG/L	ું અંથેનેળ બંળઘંઘ	. ஏ. ங.ங. ம். ஃப்ஸ்ல்ஃ	1	1. 8. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.
17206L CHLORIDE DISSOLVED CL MG/L	1.8 1.0 10. 12. 6.0 7.3	11. 6.2.2 11.24 6.1.00	V W O O O O O O O O O O O O O O O O O O	2.3 2.3 2.6 2.6 2.6 2.6 3.8 3.8
02041L SPECIFIC CONDUCT. US/CM	330. 283. 380. 492. 420. 576. 638.	577. 544. 535. 280. 378.	444. 425. 435. 339. 521. 409. 521. 530.	283. 298. 376. 424. 503. 441. 537. 538. 500. 470.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	3.00	.0 7.1 3.4 8.9	E 1 1 4	0.0.0.0.0. N
10101L ALKALINITY TOTAL CACO3 MS/L	136. 061 107. 061 116. 061 133. 061 130. 061 159. 061		129. 130. 143. 144. 185. 150. 158. 173.	120. 127. 131. 136. 155. 155. 202. 207. 190. 160.
06152F CAREON DISSOLVED INORGANIC C MG/L	35. 52 29. 52 31. 52 26. 52 30. 52 28. 52 43. 52 43. 52 43. 52	31. 52L		
10301L PH PH UNITS	00000 0000 01000 0000 0000	7.7 7.9 8.2 7.9 7.9 7.9 7.9	ფფფფფ ფ <u>৮</u> ფფფ გაგი 100 9 4 2	000000 000 000 000 000 000 000 000 000
SUBM	0479 0479 0479 0479 0479 0479	0479 0479 0479 0479 0479	0479 0479 0479 0479 0479 0479 0479	0479 0479 0479 0479 0479 0479 0479 0479
SAMPLE DATE MST D M Y HR	14 05 79 1000 04 06 79 0945 16 07 79 0940 27 08 79 0950 17 09 79 0950 22 10 79 1135 11 12 79 1100 21 01 80 1200	02 80 04 80 05 80 07 80	05 08 80 1040 15 09 80 1010 20 10 80 1030 25 11 80 1140 03 12 80 1115 16 02 81 1130 09 03 81 1130 11 05 81 1115	01 06 81 1430 01 07 81 1100 17 08 81 1045 21 09 81 1015 19 10 81 1015 15 12 81 1310 25 01 82 1215 16 02 82 1215 22 03 82 1200 26 04 82 1130

PAGE 16

NAQUADAT DETAILED REPORT PHOSPHORUS AND NITROGEN FORMS

	07506L NITROGEN TOTAL AMTONIA N MG/L					1:1	L.1	L.1 5.	5.
PR 4 UTM 12 563800E 5620800N	07110D NITROGEN DISSOLVED NO3 & NO2 N	.29 10L .17 10L .01 10L .01 10L	.01 10L 1.2 10L 1.10 10L 1.5 10L 1.2 10L	1.4 10L .70 10F L.01 10F .30 10F L.01 10F	L.01 10F L.01 10F .07 10F .58 10F	.62 10F .95 10F .65 10F .62 10F L.01 10F	.29 10F L.01 10F .01 10F L.01 10F L.01 10F	1.00 10F 1.10 10F 1.60 10F 1.60 10F 1.50 10F	.68 10F
	07651L NITROGEN DISSOLVED N MG/L	.53 .17 .14 .33	1.23 1.6 1.6	1.9 .12 .12 .45	H 2 K 2 6 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		.39 .13 .15 .20	.95 1.20 2.50 1.90 1.60	76.
	15256F PHOSPHORUS DISSOLVED ORTHO PO4 P MG/L					L. 003	.010 L.003 L.003 L.003	.018 .079 .170 .170	.060
	15356F PHOSPHORUS DISSOLVED INORG, PO4 P MG/L								
STATION ODALOSAKODO1 LAT. 50D 44M 15S LONG. 110D 5M 45S SOUTH SASKATCHEWAN RIVER AT HWY 41, ALBERTA	15103D PHOSPHORUS DISSOLVED P MG/L	.017 03L .013 03L L.003 03L .007 03L	.010 03L .012 03L .023 03L .067 03L	.16 03L .077 03F .010 03F .031 03F	.009 03F .006 03F .003 03F .041 03F	.034 03F .090 03F .038 03F .033 03F	.020 03F .004 03F .003 03F .006 03F	.029 03F .082 03F .170 03F .180 03F	.068 03F
	15301L PHOSPHORUS TOTAL INORGANIC P MG/L								
	15406L PHOSPHOROUS TOTAL PHOSPHATE P MG/L	.136 .17 .023 .027	.021 .039 .026 .073	.21 .210 .069 .290	.021 .010 .055 .063	.093 .140 .063 .20	.19 .066 .037 .021	.071 .100 .190 .190	.360
	SUBM	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462	0462
	SAMPLE DATE MST D M Y HR	09 05 79 0720 12 06 79 0900 17 07 79 1040 21 08 79 1330 11 09 79 0935	23 10 79 0915 20 11 79 0930 04 12 79 1030 15 01 80 0845 19 02 80 0940	18 03 80 1005 15 04 80 0720 21 05 80 0615 10 06 80 0630 29 07 80 0750	12 08 80 0700 09 09 80 0720 21 10 80 0815 18 11 80 0900 09 12 80 0835	20 01 81 0900 17 02 81 0930 17 03 81 0900 07 04 81 0840 05 05 81 0750	23 06 81 0650 21 07 81 0550 18 08 81 0715 22 09 81 0800 27 10 81 0835	17 11 81 0840 01 12 81 0845 19 01 82 0950 09 02 82 0940 16 03 82 1030	20 04 82 0840

PAGE 17

NAQUADAT DETAILED REPORT PARTICULATES TEMP DOC UTM 12 563800E 5620800N PR 4 LONG. 110D 5M 45S ALBERTA STATION 00AL05AK0001 LAT. 50D 44H 15S SOUTH SASKATCHEWAN RIVER AT HWY 41,

06104L CARBON DISSOLVED ORGANIC C MG/L	ที่ณีที่ที่ณี	* તં તં તં નં	3. 04F	3.04F 2.04F 2.04F 2.04F	2. 04F 2. 04F 3. 3.	ં ં ં ં ં ં ં ં	ณ่ ณ่ ค่ ณ่ <i>จ่</i>	m
06902L CARBON ORGANIC PARTICULATE C MG/L	3.2 3.2 16 25 72.	44. 44. 74. 74. 74. 74.	2.0 	.50 .33 .72 .72		2.10 1.40 1.30	1.10 .33 .26 .22 1.50	5.40
07902L NITROGEN PARTICUL. N MG/L	.05 .03 .07	.10 .09 .06 .05	.13 .22 .58 .58		.10 .13 .78 .52	8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	.17 .05 .05 01	.76
10501L RESIOUE FIXED NONFILTR.	172. 123. 2. 11.	, , , , , , , , , , , , , , , , , , ,	32. 220. 5.	6. 11. 2.	8 9.	168. 27. 7.	18. 1. 3.	208.
10401L RESIDUE NOMFILTR. MG/L	189. 128. 2. 11. 11.	19.5 1.6.9	8. 66. 35. 241. 7.	6. 49. 14. 2.	11. 39. 104. 61.	180. 70. 29. 13.	22. 25. 36.	224.
02073L TURBIDITY JTU	. 6 % 8. 6 % 9. 6 %	2 H H H H G	7.2 40.0 14.0 95.0 5.3	4 W 7.8 5 m 0 m 8	22.0 22.0 8.4 23.	75. 40.0 18.0 4.7 7.1	16.0 3.3 3.0 3.0 25.0	75.0
02061F TEMPERATURE OF WATER DEG.C.	8.0 61S 17.5 61S 22.5 61S 24.5 61S 14.5 61S	5. 618 .0 618 .5 618 .5	2.0 8.0 18.5 15.0	16.0 13.5 5.0 5.0	0.1.0 12.0.4 12.0.4	14. 21.0 20.0 11.0 3.5	3.0 0.0 0.1	2.0
SUBH	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462 0462 0462 0462 0462	0462
SAMPLE DATE NST D M Y HR	09 05 79 0720 12 06 79 0900 17 07 79 1040 21 08 79 1330 11 09 79 0935	23 10 79 0915 20 11 79 0930 04 12 79 1033 15 01 80 0845 19 02 80 0940	18 03 80 1005 15 04 80 0720 21 05 80 0615 10 06 80 0630 29 07 80 0750	12 08 80 0700 09 09 80 0720 21 10 80 081 5 18 11 80 0900 09 12 80 083 5	20 01 81 0900 17 02 81 0930 17 03 81 0900 07 04 81 0340 05 05 81 0750	23 06 81 0650 21 07 81 0550 18 08 81 0715 22 09 81 0800 27 10 81 0835	17 11 81 0840 01 12 81 0845 19 01 82 0950 09 02 82 0940 16 03 82 1030	20 04 82 0840

FAGE 18

NAQUADAT DETAILED REPORT PH DIC ALK COND CL SIO2

UTM 12 563800E 5620800N PR 4 STATION 00AL05AK0001 LAT. 50D 44M 15S LONG. 110D 5M 45S SOUTH SASKATCHEWAN RIVER AT HWY 41,

14105L SILICA REACTIVE SIO2 MG/L	4 W		0.5 0.7 0.4 0.5 0.4	अं कं कं लं लं	4 E	5.0 1.0 1.1	3.0 % % % % % % % % % % % % % % % % % % %
17206L CHLORIDE DISSOLVED CL MG/L	8 1 1 1 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.7.6 0.9.9.9.9.9.9.9.	9.6 8.1.8 9.5 8.1.8	0 0 7 4 0	4 m m o 4	1.8 2.9 2.9 7.7 7.6	5.8 12.0 7.9 7.5
02041L SPECIFIC CONDUCT. US/CM	342. 293. 356. 400. 437.	494. 484. 594. 578.	506. 419. 362. 316. 428.	410. 400. 428. 409. 494.	430. 463. 403. 497. 325.	324, 329, 365, 363,	413. 467. 592. 493. 404.
10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	000	• • • • • •	0	4.4 0. 0.1.7	00000	0.28.0.1.00.0.	
10101L ALKALINITY TOTAL CACO3 MG/L	130.06L 102.06L 99.06L 88.06L 106.06L	135. 06L 142. 06L 154. 06L 164. 06L 180. 06L	125. 06L 120. 119. 114.	112. 105. 138. 140.	150. 152. 123. 148.	127. 120. 116. 113.	143. 163. 227. 185. 135.
06152F CARBON DISSOLVED INORGANIC C	34. 52L 26. 52L 23. 52L 22. 52L 24. 52L	31. 52L 36. 52L 39. 52L 40. 52L 29. 52L	29. 52L				
10301L PH PH UNITS	V & & & & & & & & & & & & & & & & & & &	8 8 8 8 8 8 8 8 8 8	7.88.7.7.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9	00000 0.0000 0.0000	8 7 8 8 8 6 8 1 1 8 8	00000 10000	88.3 7.7 7.5 7.5 7.5
SUBM	0462 0462 0462 0462 0462						
SAMPLE DATE MST D M Y HR	09 05 79 0720 12 06 79 0900 17 07 79 1040 21 08 79 1330 11 09 79 0935	23 10 79 0915 20 11 79 0930 04 12 79 1030 15 01 80 0845 19 02 80 0940	18 03 80 1005 15 04 80 0720 21 05 80 0615 10 06 80 0630 29 07 80 0750	12 08 80 0700 09 09 80 0720 21 10 80 0815 18 11 80 0900 09 12 80 0835	20 01 61 0900 17 02 81 0930 17 03 81 0900 07 04 81 0840 05 05 81 0750	23 06 81 0650 21 07 81 0550 18 08 81 0715 22 09 81 0800 27 10 81 0835	17 11 81 0840 01 12 81 0845 19 01 82 0950 09 02 82 0940 16 03 82 1030 20 04 82 0840

